

THE BRITISH JOURNAL OF CHILDREN'S DISEASES.

FOUNDED BY GEORGE CARPENTER, M.D.

EDITED BY J. D. ROLLESTON, M.D.

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Original Articles.

THE TREATMENT OF CONGENITAL HYPERTROPHIC PYLORIC
STENOSIS. MEDICINE *VERSUS* SURGERY.

By LEONARD FINDLAY, M.D., D.Sc.,

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Medical Diseases of Children, Glasgow University.*

BEFORE entering on a discussion of the relative merits of medicine and surgery in the treatment of congenital hypertrophic pyloric stenosis, it seems to me that a due appreciation of the various factors which enter into the production of the symptoms is essential. The name "pyloric stenosis" is apt to conjure up the picture met with in the case of the adult after ulceration. This latter is due to cicatricial contraction, and in consequence is fixed and unchangeable. In hypertrophic pyloric stenosis, on the other hand, the obstruction is in great part due to spasmodic contraction of the hypertrophied pyloric ring. One must not, of course, forget the swelling of the mucous membrane from catarrh consequent on retention of the gastric contents as playing some part, nor the relative smallness of the peritoneal coat at this period of life, which has been suggested by Thomson (1) as not only in part explaining the cause of, but also the variation in, the severity of the symptoms. To my mind, however, spasm is the predominant factor. This conception of the nature and cause of the obstruction is surely the only one that can be accepted in view of certain characteristic features of the life-history of the disease,

2 CONGENITAL HYPERTROPHIC PYLORIC STENOSIS.

viz. the sudden onset of the symptoms, their intermission, perhaps for days, and at times their sudden disappearance after the application of appropriate medical measures. Personally I have never observed the presence of dilatation of the stomach and visible peristalsis before the onset of the acute symptoms, yet I have no doubt that if a suitable opportunity presented itself, such evidence of the disease, though still in a latent state, would be found. I have, however, followed many a typical example for weeks or even months after medical or surgical treatment had brought about a cure, and although the child had no vomiting, and was rapidly putting on weight, as is usual in this disease during convalescence, very definite and forcible gastric peristalsis could be elicited. Under these circumstances the hypertrophied pylorus and stomach-wall persisted, but there was an absence of all tendency to spasm, and the symptoms in consequence had disappeared.

It is the different appreciation of this element of spasm which accounts for much of the difference in point of view of the physician and the surgeon. The surgeon pictures the condition as an organic obstruction; in fact, to my mind, he is obsessed by the hypertrophy of the pylorus, and consequently cannot understand how anything short of operation will bring about relief. This attitude of mind is very well exemplified in the dictum of Scudder (2), one of the surgical pioneers in this field. In 1907 Scudder wrote: "If untreated, the disease is usually fatal. When medical treatment has been followed by a cure the existence of the disease was never demonstrated. If the obstruction is complete immediate operation is demanded. If the obstruction is incomplete and the child is losing weight, operation is indicated. If the obstruction is partial and the child is not losing rapidly a short trial with medical treatment may be justified."

I suppose even this attitude would be considered to-day by some surgeons as unduly conservative. In their view the condition is a surgical one, and invariably should be treated surgically. Warren (3) categorically states that most cases of hypertrophic stenosis of the pylorus die if treated medically. Yet those who are loudest in their demands for surgical intervention advise that if the child is very ill medical measures should be adopted for some days to improve his condition and make him fit to withstand the shock of the operation. Surely in view of this admission one might be permitted to remark that it would perhaps be wise to give medical treatment a chance to complete the cure thus inaugurated.

In the above quoted extract from Scudder we find the oft-repeated remark of the surgeon, that if the case recovers under medical treatment there is no proof that there was a true hypertrophy of the pylorus.

Apparently for many surgeons, the only proof that there existed a hyperplasia of the pyloric muscle is the revealing of the tumour either at operation or on the post-mortem table.

Congenital hypertrophic pyloric stenosis is, to my mind, a clinical entity which can be recognised by any experienced pædiatrician with a confidence that does not obtain in the majority of the conditions which he is called upon to treat, and one which can be indubitably diagnosed without the presence of a palpable tumour. Personally I have only seen one case operated upon in error, and as congenital atresia of the duodenum was revealed at the operation one must admit that the error was excusable, but I have never seen a case go to post-mortem examination in which the diagnosis of pyloric stenosis had been made during life, and which did not turn out to be a true example of the disease. I have, however, on two occasions seen a case admitted to hospital *in extremis* and suffering from convulsions, in which post-mortem examination disclosed pyloric hyperplasia, but in neither case had the condition been suspected and a search made for the classical signs.

The pyloric tumour of which so much is made by the surgeon is not a *sine quâ non* for diagnosis—a fact lately admitted by Parsons and Barling (4). There are scattered throughout the literature a sufficient number of undoubted examples of the disease reacting to medical treatment in which no tumour had been felt, and which, dying later, were verified by post-mortem examination to have pyloric hyperplasia. In the majority of my own operation cases, as will be observed from the details in the appendix, no pyloric tumour was felt, and yet in all of them the surgeon verified the diagnosis. Even Drs. Gray and Pirie (5), and also Mr. Warren (3), who are so insistent on the necessity of detecting a palpable tumour before operating, have among them only observed one case in which they were deceived by visible peristalsis, and thus operated in error—a proportion of surprises which is surely unique in abdominal surgery. It should not be forgotten, too, that the feeling of a tumour may possibly be misleading. I always remember a case of pyloric stenosis in the treatment of which I was associated with Sir Kennedy Dalziel, and in which we were both certain that a pyloric tumour could be felt, yet on opening the abdomen immediately afterwards the pylorus was found tucked up under the liver in such a position that it could not possibly have been palpated.

For me, visible gastric peristalsis is the one important sign of the condition, but it must be marked and definite. I know of two cases of pylorospasm in which the surgeon, unfortunately in view of the issue, persisted in operating on account of the inveterate vomiting, and found, as was predicted on account of the absence of visible gastric peristalsis,

a normal pyloric ring, but with the single exception (atresia of duodenum) mentioned above, I have never seen definite and marked gastric peristalsis in an infant in the absence of true hypertrophic pyloric stenosis.

The physician, appreciating the spasmodic factor in the case, naturally has been less inclined to consider operation essential. Prior to a decade ago the majority of physicians were definitely opposed to surgery. Notable exceptions were Cautley (6) and Kerley (7), who have long and persistently recommended surgical intervention. Since that time, however, the opinion of physicians has undergone a marked change, and it is specially interesting to note the conversion to the value of surgery of some of those who were previously most bitterly opposed to it.

Holt (8), for example, in 1909 stated that surgery only held out slender hope of relief, but in 1922 he (9) recommends that when the case is first seen, operation should be advised if the symptoms have lasted two or three weeks without material improvement, or if there has been a steady, though not rapid, loss of weight. While admitting that some of these latter cases recover without it, he believes that the risks of waiting are greater than the risks of the operation, which should be resorted to early in all cases classed as the severe type.

Hutchison (10), writing in 1910, remarks that although he "commenced his experience with a bias in favour of operation, he would unhesitatingly say *never operate*,"* as a child is never too far gone to be beyond the reach of medical help, but frequently is too ill to withstand the shock of the operation," and he substantiates this opinion by recording his experience in seventeen private cases treated medically, with recovery in all of them. Nevertheless, this same writer (11) in 1920 recommends, but without this time quoting figures, that operation should be seriously considered if the child does not definitely improve after ten or twelve days of medical treatment, because surgical treatment has improved so much within recent years. This change of view is all the more remarkable in view of the excellence of the previously mentioned results which were obtained by this author in his private practice.

And finally, Still (12), in 1915, stressed the fact that cases do recover by medical treatment alone, and recorded a case which, unfortunately, was submitted to operation and died although it had been previously making good progress under medical measures. In 1915 Still was apparently anything but enthusiastic regarding surgical intervention, but in 1921 (13) we find him writing that since early surgical treatment has become frequent the mortality has been reduced, and the condition is by no means the hopeless one it was once considered.

Is this change of attitude on the part of the physician towards surgical

* The italics are mine.

intervention justified? Are better results really obtained by surgical than by medical treatment? Is the evidence extant in favour of all examples of this disease being submitted to operation, as recent surgical authors, not only in this country, but also in America, insist? These are the questions which I will attempt to answer, not only from an analysis of my own material, hospital and private, but in addition by a reference to the records of other pædiatricians.

Many writers of course state that it is very difficult, if not impossible, to settle the question at issue from statistics, as the condition of the patient and the type of the case in those treated medically and surgically are not necessarily alike. Others again, and not only surgeons, but also physicians, hold that it is only the severest forms of the disease which are given over to the surgeon. Finkelstein (14), while believing that this is really the case, remarks that this can, however, be neutralised by the tendency of the surgeon to record more frequently his successful than his unsuccessful results, which increases the number of apparent surgical recoveries.

Personally I doubt very much the validity of these objections. In my own practice I have handed over to the surgeon, just as I have retained for myself, examples of long and short duration and cases in both good and bad condition. Most physicians, too, must have had the experience of the surgeon refusing to operate because the child was too ill, and yet with medical treatment a cure being ultimately obtained. In any case the claims of surgery are wholly based on statistical grounds.

There is, however, one important point to remember in connection with statistics, viz. the danger of drawing conclusions from small series of cases. Just as there is a marked tendency for examples of any disease to appear in cycles, so do the results of our treatment of any condition tend to come and go. This is well exemplified in my own hospital records, from which I quote the following three groups of consecutive cases. It is quite apparent that one's idea of the results of treatment would vary very much according to which group was selected, and it would be no more justifiable to claim the 90 per cent. recovery rate in Group C than the 90 per cent. mortality rate of Group A as indicative of the usual outlook in the disease.

Another point of considerable importance in the correlation of statistics, at least in the case of congenital hypertrophic pyloric stenosis, is to avoid the comparison of hospital and private material. So different are the results in these two fields of practice by either method of treatment that to combine them in any statistical investigation, as was done by Barling and Parsons, must necessarily vitiate the conclusions. This fact was strikingly demonstrated by John Thomson (15) in his exhaustive treatise of the subject some two years ago, and will be reverted to later.

6 CONGENITAL HYPERTROPHIC PYLORIC STENOSIS.

TABLE I.—*Three Small Groups of Consecutive Cases of Pyloric Stenosis, showing very Different Results.*

A.			
Age.	Date of admission.	Result.	
3 weeks	19.12.14	Died (operation)	7 died. 1 well. 1 <i>in statu quo</i> . Recovery-rate = 11 per cent.

During the past six years I have seen in all 80 cases of hypertrophic pyloric stenosis; 62 occurred in my hospital practice* and 18 in private. In view of the above remark that the probable result depends on the source of the material, the hospital and private cases have been classified apart.

* This analysis does not refer to all the hospital material, but only to those cases passed through the Medical Department.

TABLE II.—*Hospital Cases.*

Treated surgically.			Treated medically.		
Total.	Recovered.	Percentage of cures.	Total.	Recovered.	Percentage of cures.
12	3	25 per cent.	50	19	38 per cent.

Of those treated medically—

4 were dismissed irregularly. 2 died within 72 hours of admission.
 2 died within 24 hours of admission. 1 was admitted with pyelonephritis.

TABLE III.—*Private Cases.*

Treated surgically.			Treated medically.		
Total.	Recovered.	Percentage of cures.	Total.	Recovered.	Percentage of cures.
6	3	50 per cent.	12	10	83 per cent.

Of those treated medically, 1 died and 1 was lost sight of.

From these figures the difference in the results from either method of treatment in hospital and in private practice is apparent, the recovery-rate being at least 100 per cent. better in private than what it is in hospital.

Of the 18 cases seen in private, 6 were submitted to operation, with a recovery-rate of 50 per cent., whereas of the 12 cases treated by medical means, 83 per cent. recovered; one case was lost sight of and one died of pyelitis.

Of the 62 cases treated in hospital, 12 were operated upon with a recovery-rate of 25 per cent., whereas of the 50 treated medically, 19 recovered, giving a cure in 38 per cent. of the cases. If one deducts from the latter group the 4 cases dismissed irregularly, the 2 who died within 24 hours after admission, and the case admitted with pyelonephritis, then the recovery-rate in the hospital cases in which medical treatment was really given a trial amounts to 41 per cent., which compares favourably with the 45 per cent.* of operative cures obtained by Parsons and Barling (4) in their hospital material.

It might, of course, be argued that the cases submitted to operation were not in such good condition as those retained for medical treatment, but reference to the details of the cases given in the appendix will not

* I have deducted from the authors' published figures the private cases and re-calculated the recovery-rate.

reveal anything to substantiate such a contention. In the case of the private cases, the duration of illness before operation varied between one and seven weeks, the average duration being three weeks, and the weight of the children between 6 and $8\frac{1}{2}$ lb., with an average weight of $7\frac{1}{2}$ lb., whereas in those treated medically the duration of the symptoms before coming under observation varied between two and fourteen weeks, the average being seven weeks, and the weight of the children between 5 and 8 lb. 4 oz., with an average weight of 7 lb.

In the hospital cases operated upon the duration of the symptoms varied between one and twelve weeks, the average being 4.25 weeks, and the weight of the children between 4 lb. and 8 lb., the average being 6 lb. 12 oz., whereas of those treated medically the duration of the symptoms varied between one and thirteen weeks, with an average of 6.9 weeks, and the weight between 5 lb. and 10 lb. 12 oz., with an average of 7 lb. $\frac{1}{2}$ oz. Between the two groups of hospital patients there was therefore very little difference in weight, and if anything, those operated upon had the advantage of not having been subjected to the process of starvation, on the average, for such a long period as those retained for treatment by medical measures.

It is generally stated that the age of the child at the onset of the symptoms has a prognostic value, the younger the age at which the symptoms appear and become marked the more serious being the outlook, and the point on which there is perhaps the greatest unanimity among the various medical and surgical writers is that the very young cases are those which should be treated surgically. Consequently I have analysed my own material according to this factor, viz. age of onset of symptoms, and as before have kept the hospital and private cases apart. The details are shown in the following tables :

TABLE IV.—*Hospital Material.*

Age at onset of symptoms.	Surgical cases.			Medical cases.		
	Total number.	Number cured.	Percentage recovery.	Total number.	Number cured.	Percentage recovery.
Birth	3	1	33	17	4	23
1 week	1	0	0	7	2	28
2 "	3	1	33	10	4	40
3 "	2	1	50	8	2	25
4 "	1	0	0	2	1	50
5 "	1	0	0	5	3	60
6 "	1	0	0	1	1	100
Average under 3 weeks .	9	3	33	42	12	28
Average over 3 weeks .	3	0	0	8	5	62

TABLE V.—*Private Material.*

Age at onset of symptoms.	Surgical cases.			Medical cases.		
	Total number.	Number cured.	Percentage recovery.	Total number.	Number cured.	Percentage recovery.
Birth	1	1	100	3	3	100
1 week	0	0	0	1	0	0
2 "	1	1	100	2	1	50
3 "	1	0	0	1	1	100
4 "	2	0	0	2	1	50
5 "	1	0	0	0	0	0
6 "	0	0	0	3	3	100
Average under 3 weeks .	3	2	66	7	5	71
Average over 3 weeks .	3	0	0	5	4	80

Of the above series of cases the only one that is sufficiently large to allow of any definite conclusions is that referring to those treated medically in hospital. This series of 50 cases shows a very definite tendency for the recovery-rate to increase as the age of onset is delayed, the only break in the consecutive rise of the recovery-rate being that referring to the cases in which the symptoms developed during the third week. This same tendency is also revealed in the private cases treated medically. In the case of the operation cases, on the other hand, a totally different state of matters is shown. Without exception the only patients who recovered after surgical intervention were those who developed the symptoms before the age of three weeks. The number in these latter groups is, however, so small that one must not imbue them with too much significance.

In view of the tendency of current written medical opinion on the question I must say that I was considerably astonished at the result of the above analysis. I did not expect that there would be revealed any marked advantage in favour of medicine in the treatment of the disease, but rather, perhaps on account of John Thomson's late communication, that there would have been little, if anything, to choose between the results of the two methods. It, however, directed me again to a search of the literature when I found that, after all, such favourable results from medical treatment were not exceptional.

The best surgical results that I have been able to find are those of Strauss (16), who obtained 95·4 per cent. of successes, but he does not state what proportion of the cases occurred in hospital and what proportion in private. Kerley (17) reports the results in 26 private cases operated upon by Downes after Rammstedt's method with a recovery-

rate of 85 per cent., a rate, however, which is practically identical with the 83 per cent. obtained in my own private cases treated medically and the 78 per cent. in John Thomson's private cases. Heubner (18), also dealing with private cases, obtained a cure in 90 per cent. of 17 infants treated medically, and I have already referred to Hutchison's 100 per cent. recovery-rate in 17 private cases to which he referred in the 1910 Schorstein Lecture.

When we come to consider hospital statistics, the result of medical treatment, though making on the whole very sad reading, would seem, nevertheless, to be still superior to that obtained by surgical intervention. Specially worthy of notice are the records of Reiche (19) and Ernberg and Hamilton (20). The former, in the Kaiserin Augusta Victoria Haus, Berlin, obtained by medical measures a satisfactory termination in 89·4 per cent. of 47 cases, and the latter authors obtained even better results, only losing 2 out of 38 infants, which means a recovery-rate of 96·5 per cent.

In the face of these records of medical treatment, the results of surgical intervention reported from the London Hospital by Warren (3), from Great Ormond Street by Gray and Pirie (5), and from Birmingham by Parsons and Barling (4), sink into insignificance, and one has serious cause to pause and consider before recommending operation. I would not say that operation should never be entertained, but I feel strongly that it should be reserved for cases which are seen soon after the onset of the disease, and in view of my own figures, perhaps only for those cases in which the symptoms appear very early—say before the age of three weeks. It is without doubt exceedingly dangerous to operate on any child who has been ill for any length of time and whose tissues are depleted. My own experience, not only in private practice, but also in hospital, has been that these wasted children stand operation badly, and after surgical interference have less chance of surviving than if treated medically.

It is otherwise, however, in the case of the child coming under observation within a few days of the onset of the symptoms. Under these circumstances the idea of operation should certainly be entertained and seriously considered. The uncertainty of the issue, and the not improbably long and anxious illness through which the child will pass, assuredly make tempting any form of treatment which gives a promise of speedy relief. At this stage of the illness, too, the patient is usually in good condition, has lost little, if any weight, and is more likely to be of an age less liable to surgical shock. I think the manner in which the newborn child recovers from serious cerebral injury contracted during parturition, and the way in which operations, *e. g.* circumcision, can be performed

with safety in very young infants without anæsthesia supports this latter contention. My own experience, however, on this point is not decisive. In the hospital cases in which the symptoms appeared before the age of three weeks, slightly better results were obtained by surgical than by medical treatment, but in the case of the private material of the same type better results were obtained by medical measures.

The great danger in this disease is inanition, though it is remarkable how much vitality frequently persists in spite of severe and prolonged vomiting. Inanition may directly cause death, or indirectly through the child becoming unduly susceptible to some trivial infection. The whole idea, then, of either the surgeon or physician is to permit of the ingestion of a sufficiency of nourishment. This the surgeon attempts to bring about speedily by operation, though it would seem from the records by surgeons, *e. g.* those of Parsons and Barling, that the fear of enteritis induced them to continue unduly a starvation diet, with fatal consequences. I notice that the Americans, *e. g.* Kerley (17) and Strauss (16), very rapidly increase the diet to the normal level after operation, and this may account for their superior results.

The physician, on the other hand, attempts to allay the spasm by gastric lavage and small feeds frequently repeated, but the amount of nourishment administered is often so small that there can be no abatement of the inanition. This starvation feeding is undoubtedly the great danger in the medical treatment of pyloric stenosis, and is, I think, the cause of many of the failures. It is a truism that an emaciated infant stands starvation badly. A survey of my own material reveals this very strikingly. At one time I practised a method of dietetic treatment suggested by Prof. Stooss, of Bern, which consists in the administration of one drachm of Nestlé's milk in 100 c.c. of water every three hours. This diet was very much below the child's requirements, and all the children so treated rapidly went downhill. On the other hand, those of my cases which did best had been fed on a fairly liberal or absolutely full diet.

One striking feature of the disease, and one which I have taken advantage of in treatment, was first brought to my attention by the mother of a patient. She remarked that if the feed were repeated immediately after the attack of vomiting it was seldom rejected, and this I have since found to be an almost invariable rule. It would seem as if, after the spasm of the pylorus and contraction of the stomach-wall terminating in the forcible vomiting, a state of exhaustion ensues, with a temporary disappearance of all symptoms. In this connection the so-called thick cereal diet recommended by Sauer occurs to one's mind. This form of diet is supposed to owe its beneficial influence to the difficulty of its expulsion

APPENDIX.

PYLORIC STENOSIS—HOSPITAL CASES.

No.	Name.	Sex.	Age on admission.	Age at onset.	Duration of symptoms.	Birth weight.	Weight on admission.	Order in family.	Pyloric tumour.	Treatment.	Result.
1	J. G—	M.	3 weeks	2 weeks	1 week	lb. oz. ..	lb. oz. 7 10	..	..	Loreta. Fairly full diet. 6 lb. 12 oz. at operation	Died.
2	M. G—	F.	11 "	Birth	11 weeks	8 8	4 8	1st	+	Gastro-enterostomy. Spare diet. 4 lb. at operation	"
3	J. C—	M.	7 "	"	7 "	8 0	7 2	"	—	Diet and lavage. Fairly full diet	P.M.
4	J. M—	M.	6 "	2 weeks	4 "	..	7 0	"	—	Loreta. 7 lb. at operation	"
5	D. M—	M.	6 "	2 "	4 "	..	7 0	6th	—	4th child operated upon and died. Diet	I.S.Q. I.D.
6	A. W—	M.	3 months	2 "	10 "	..	7 14	1st	—	Diet and lavage. Spare diet	Died. P.M.
7	P. L—	M.	6 weeks	3 "	3 "	..	7 8	"	+	Loreta. 7 lb. 1 oz. at operation	"
8	M. B—	F.	4 "	3 "	1 week	..	7 6	"	+	Diet spare. 3 days under observtn.	I.S.Q. I.D.
9	E. P—	F.	6 "	2 "	4 weeks	..	5 14	4th	+	Rammstedt. 5 lb. 14 oz. at operation	Well.
10	J. McG—	M.	4 months	Birth	4 months	..	7 0	1st	—	Diet fairly full. Lived 4 days	Died.
11	M. B—	F.	7 weeks	6 weeks	1 week	..	7 4	"	—	Diet and lavage. Half diet at first, later full	Well.
12	B. C—	F.	2 months	6 "	2 weeks	..	7 12	3rd	+	Rammstedt. 6 lb. 13 oz. at operation	Died.
13	E. M—	F.	7 weeks	Birth	7 "	..	7 13	..	—	Loreta. Good diet. 7 lb. 6 oz. at operation	Well.
14	N. D—	M.	5 "	"	5 "	..	5 11	1st	—	Loreta. Fair diet. 5 lb. 8 oz. at operation	Died.
15	L. C—	M.	2 months	"	2 months	..	8 3	9th	—	In ward 4 months. Enteritis. Lavage and diet. Whooping-cough. Fair diet	" P.M.
16	A. C—	M.	9 weeks	"	9 weeks	..	8 0	2nd	—	Diet and lavage. Spare diet	"
17	C. O—	M.	2 months	"	2 months	..	10 7	1st	—	Ample diet	Well.
18	A. O'R—	M.	8 weeks	3 weeks	5 weeks	..	5 14	"	—	Pept. milk and lavage. Spare diet	Died. P.M.
19	J. M—	M.	6 "	Birth	6 "	..	5 12	"	—	Diet and lavage, underfed	B.P. P.M.
20	M. P—	F.	6 "	2 weeks	4 "	..	6 6	3rd	+	" " " In hospital 3 days	I.S.Q. I.D.
21	J. R—	F.	8 "	2 "	6 "	..	6 3	7th	—	Diet and lavage. Fairly full diet	Well.
22	J. S—	M.	2 months	Birth	8 "	..	6 11	5th	—	Cereal mixture	Died. B.P. P.M.
23	C. W—	M.	3 "	"	3 months	..	8 5	2nd	—	Diet and lavage. Good diet	P.M.
24	J. McI—	M.	3 "	4 weeks	8 weeks	..	5 0	"	—	" " " "	" Peritonitis.
25	J. S—	M.	2 "	3 "	5 "	7 12	6 2	1st	—	" " " Fairly full diet	Well.
26	J. W—	F.	8 weeks	4 days	7 "	7 8	6 8	"	—	" " " Full diet	"

	O. R.—	M.	2 months	2 weeks	6 weeks	..	6	15	2nd	—	Diet, fairly full.	Lived 10 days	Died.
27	J. McF—	M.	14 weeks	1 week	13	..	5	14	3rd	—	"	Lived 1 day	"
28	J. F—	M.	3 months	3 weeks	9	..	5	3	1st	—	"	"	"
29	J. K—	M.	11 weeks	5	6	10	0	7	3rd	+	Diet, underfed	"	"
30	J. D—	M.	11	1 week	10	..	7	9	6th	—	Diet and lavage.	Full diet	I.D.
31	H. E—	F.	7 months	Birth	7 months	..	10	6	4th	—	"	"	Well.
32	W. McG—	M.	13 weeks	13 weeks	14	..	8	4	"	—	"	"	Died.
33	J. Y—	F.	14	"	14	..	7	6	3rd	—	"	Fair diet	I.D.
34	J. R—	F.	2 months	"	8	6	4	7	4	+	Diet. Fair diet	"	Well.
35	E. McL—	F.	10 weeks	2 weeks	8	..	8	2	1st	—	Diet and lavage.	Full diet	"
36	A. L—	M.	10	Birth	10	10	0	9	2nd	—	"	Fair diet	"
37	L. S—	F.	8	3 days	8	..	9	11	"	—	"	Full diet	"
38	D. M—	M.	10	2 weeks	8	9	0	6	3	—	"	Latterly full diet	"
39	D. T—	M.	12	3	9	..	7	0	2nd	—	"	Starved, lavage	Died.
40	M. G—	F.	9	5	4	..	5	6	4th	+	Rammstedt	"	"
41	D. C—	F.	8	5	3	7	8	6	1st	+	Diet, Nestlé's, starvation diet.	"	"
42										+	Lived 3 days	"	"
43	W. W—	M.	7	1 week	6	..	6	1	"	+	Diet, Nestlé's, starved, lavage	"	P.M.
44	P. H—	M.	8	3 days	8	..	6	4	8th	+	Diet and lavage. Spare diet	"	"
45	T. E—	M.	8	2 weeks	6	..	6	14	2nd	—	"	Underfed	"
46	J. M—	M.	8	3	5	9	0	7	1st	—	"	"	"
47	M. J—	M.	8	5	3	6	8	7	3rd	—	"	Full diet	Well.
48	J. S—	M.	12	3 days	11	8	0	7	2nd	+	"	Underfed. Lived 3 days	Died.
49	J. H—	M.	6	4 weeks	2	8	8	5	1st	—	Loreta	"	"
50	A. McM—	M.	8	3	5	..	7	6	"	—	Diet and lavage.	Underfed	P.M.
51	B. S—	F.	7	Birth	7	10	0	5	2nd	+	"	"	Died.
52	J. McL—	M.	10	"	10	..	5	14	1st	+	"	Full feeds, repeated after vomiting	Well.
53	R. L—	M.	3	9 days	2	..	6	11	2nd	—	Rammstedt	"	Died.
54	J. A—	M.	11	3 weeks	8	Big	5	8	5th	—	Diet and lavage.	Fairly full diet.	Well.
55	J. McA—	M.	5	Birth	5	7	12	5	10	—	Feeds repeated after vomiting	"	"
56	A. G—	M.	4	3 weeks	1 week	8	8	8	0	—	Diet and lavage. Moderate diet	"	"
57	J. M—	M.	8	2	6 weeks	10	8	7	12	?	Rammstedt. (Good condition.)	"	Died.
58	S. Y—	M.	14	4	10	Average	10	12	2nd	+	Diet and lavage.	Fairly full diet	Well.
59	A. T—	M.	7	5	2	7	0	5	1st	+	"	Full diet	"
60	R. C—	M.	6	2	4	Small	5	12	"	—	Diet. Lavage at first, stopped as child collapsed.	Fairly full feeds	"
61	E. H—	M.	6	1 week	1 week	6	12	4	6	—	Diet. Moderately full diet	"	Died.
62	M. H—	F.	6	5	6 weeks	Small	5	10	3rd	—	Diet and lavage. Full diet	"	Well.
				Birth	6 weeks	Small	5	10	"	—	Breast <i>ad lib.</i> 3-hourly and feeds repeated if vomited	"	"

Abbreviations: B.P. = broncho-pneumonia; G.E. = gastro-enteritis; I.D. = irregular dismissal; I.S.Q. = *in statu quo*; P.M. = post-mortem examination.

PYLORIC STENOSIS—PRIVATE CASES.

No.	Name.	Sex.	Age on admission.	Age at onset.	Duration of symptoms.	Birth weight.	Weight on admission.	Order in family.	Pyloric tumour.	Treatment.	Result.
						lb. oz.	lb. oz.				
1	B. McC—	..	7 weeks	3 weeks	4 weeks	..	..	..	? +	Rammstedt.	..
2	R. C—	M.	11 "	4 "	7 "	9 8	8 0	2nd	—	Rammstedt	Died.
3	J. B—	M.	6 "	5 "	1 week	9 0	9 14	1st	—	Diet and lavage	Well.
4	B. B—	M.	8 "	6 "	2 weeks	5 0	5 0	6th	—	Rammstedt. In good condition	"
5	B. McB—	F.	3½ "	3 "	1 week	8 0	..	1st	—	None	Died.
6	T. S—	M.	4 months	6 "	10 weeks	..	..	"	—	1 per cent. fat, C.H.O. and lavage.	Well.
7	B. T—	M.	9 weeks	4 "	5 "	8 0	7 8	"	—	Fairly full diet	"
8	J. McD—	M.	3 "	Birth	3 "	8 4	6 0	"	+	Rammstedt	"
9	B. S—	M.	9 "	4 weeks	5 "	7 0	..	2nd	—	Rammstedt	Died.
10	A. P—	M.	9 "	4 "	5 "	7 8	Very much emaciated	4th	—	..	..
11	F. F—	M.	8 "	6 "	2 "	6 4	7 0	2nd	+	Pept. milk and lavage. Fairly full diet	Well.
12	R. D—	M.	10 "	Birth	10 "	Small	7 0	5th	—	Pept. milk. 4-hourly feeds repeated if vomited	"
13	C. S—	F.	9 "	"	9 "	7 12	7 0	3rd	? +	Pept. milk. Full diet, feeds repeated after vomiting	"
14	R. R—	M.	4 months	2 weeks	14 "	8 0	7 6	1st	+	Pept. milk and lavage. Pyelitis	Died.
15	J. A—	M.	7 weeks	3 "	4 "	7 0	8 0	2nd	? +	Pept. milk	Well.
16	B. P—	M.	3 "	2 "	1 week	8 4	8 4	3rd	—	Rammstedt	"
17	C. McD—	F.	10 "	Birth	10 weeks	7 8	..	2nd	—	Diet. Full diet	"
18	A. G—	M.	7 "	1 week	6 "	10 0	8 0	5th	—	Pept. milk and lavage and feeds repeated	"

from the stomach, and probably also acts by inducing a fatigue paralysis of the pylorus and stomach.

However we may attempt to explain this peculiarity of the vomiting in pyloric stenosis it is very real, and I now always recommend the feed to be repeated if vomited. Thus by giving ample amounts of nourishment, and their repetition if ejected, we minimise the risk of starvation. Heubner, it may be recalled—and his results are as good as those quoted by any observer, surgeon or physician—took no account of the vomiting. If the child was breast-fed he allowed it to drink to satisfaction at stated times.

In conclusion I would like to draw attention to another most important point in the medical treatment of this disease, viz. the need for individual nursing. The infant requires more individual care than the older child and adult, and it is the absence of this desideratum which is such a serious drawback to hospital treatment of disease in infancy. Unquestionably it is the presence of this factor which accounts for the much superior results obtained in private practice, and forces one to raise the question if these cases should ever be treated in hospital unless constant and individual nursing, night and day, is provided. I have become more and more loth to admit such cases to the wards, and my practice is to dismiss them as soon as the symptoms show amelioration. I know of several very severe examples which have been treated with great success as out patients, and I am inclined to attribute the successful issue in these cases to the individual care and mothering which the child received, and which more than compensated for the absence of the better hygienic surroundings and more regular skilled attention available in a hospital.

CONCLUSIONS.

1. Spasm of the hypertrophied pylorus is the most important factor in causing the symptoms.
2. The results of treatment are invariably better in private than in hospital practice.
3. Medical measures give as good, if not better, results than operation.
4. Operation should probably be reserved for the youngest cases and for those seen soon after the onset of the symptoms.
5. The great danger to be avoided in any form of treatment is under-feeding.
6. The infant with congenital hypertrophic pyloric stenosis requires constant and individual care.

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HEREDITARY TYLOSIS.*

By J. D. ROLLESTON, M.D.

THE condition variously known as palmar and plantar tylosis, keratoderma palmaris et plantaris hereditaria, keratoma palmare et plantare, congenital ichthyosis and acrokeratoderma is a comparatively uncommon disease which is well known to dermatologists, but has received little attention in pædiatric literature, although an excellent coloured plate will be found in the 'Atlas of Skin Diseases in Infants and Children,' recently published by Finkelstein, Galewsky and Halberstaedter.

I recently had an opportunity of seeing a case in a little girl aged 2 years, who had been admitted to hospital for diphtheria and whooping-cough. The state of the child's hands and feet puzzled both my colleagues and myself, and it was only a few days before her discharge from hospital that I recognised the true nature of the condition by happening to read an article in one of our exchange journals, by Dr. Aronstam of Detroit, entitled "Keratoderma palmaris et plantaris hereditaria," which convinced me that my patient was an example of the condition described by him. The child showed a symmetrical thickening of the epidermis of the palms and soles, the thickening ending abruptly at the border of the palmar and plantar surfaces, and separated from the normal skin by a narrow pinkish halo. The keratosis was more marked on the palms than on the soles. The colour of the skin during the child's stay in hospital remained a dead white, but on the three occasions on which I have seen

* The case was shown at the Section for the Study of Disease in Children of the Royal Society of Medicine on November the 24th, 1922.

her since her discharge from hospital the skin has been thickly coated with London grime, the mother endeavouring to excuse its appearance by the difficulty in keeping the skin clean.

The condition was first noticed a few months after birth, and has gradually become more pronounced. Exfoliation of the palmar and plantar skin occasionally takes place. The nails are not affected, and there are no skin lesions elsewhere. Apart from a slight degree of epicanthus the child does not present any other abnormality. Like most of the cases on record, the family to which the child belongs consists of very poor and ill-educated persons, so that I had considerable difficulty in eliciting even an incomplete history. Although the information which I finally obtained about the previous generations was only fragmentary, the skin disease according to the parents appears to have been present in the family for five generations on the father's side. The mother is not affected. The only other representative of the fifth generation is the patient's sister, aged $7\frac{1}{2}$ years, who is not affected. The fourth generations consist of five living members, viz. the father, his brother and sister, who are all three affected, and another brother and sister who are normal. The father states that his eldest brother, now dead, was also affected. In the third generation the patient's paternal grandfather, his brother, sister and brother's son were affected. I have been unable to obtain any details as to the first two generations, beyond the family tradition that the mother of the first child affected was startled by a gosling flying into her lap during pregnancy.

According to Unna, hereditary palmar and plantar keratoma was first described by A. Thost in his Heidelberg thesis of 1880, entitled "*Ueber erbliche Ichthyosis palmaris et plantaris cornea*," in which an account is given of a family in which the disease had existed for four generations in at least 17 persons, of whom Thost was able to examine 8. Male and female children alike were affected, the disease being transmitted only in a direct line, and not occurring in children of healthy parents.

Gossage, in 1907, collected reports of 45 families affected with tylosis, but on close examination 6 had to be eliminated, and of the remaining 39, 10 were so incompletely reported or consisted of so few members that they were of small value. The records of the 39 families showed that the condition was handed down directly from parent to child, that it equally affected males and females (166 males and 140 females), and that it was transmitted equally through males and females.

I have been able to find eight other examples in literature besides my own case of the disease occurring in five generations, reported respectively by Date (1887), Crocker (1891), Vaughan Pendred (1898), Jonathan

Hutchinson (1898), Jamieson (1900), Halley (1903), Jacob and Fulton (1905), and Sorrentino (1905).

On the other hand, tylosis is not always hereditary. No mention is made of an hereditary history in the condition depicted in 1856 by Hebra in his 'Atlas' under the name of "Tylosis palmæ manus plana" and "Tylosis palmæ manus verrucosa," and in more recent times Thatcher definitely emphasises the absence of heredity in his description of three cases of palmar and plantar tylosis in a family which came from the island of Fetlar, Shetland.

Tylosis is usually congenital, or appears within a few months after birth. Much less frequently it is acquired. Hebra, in the description of his cases, states that tylosis always develops late in life, and may disappear spontaneously without leaving any trace after lasting for years.

Histologically tylosis consists in a hypertrophy of the stratum corneum of the epidermis, similiar to what is found in an ordinary callosity. The pathogenesis of the condition is not yet fully elucidated. A remarkable feature of tylosis, as MacLeod points out, is that it is not due to local irritation, elimination of arsenic through the skin, or other causes which tend to produce hyperkeratosis.

Decroo regards keratoderma as a variety of nævus, of which it possesses the four essential features, viz. (1) congenital character, (2) hereditary transmission, (3) immobility, (4) incurability. In this connection it is interesting to note the history in the present family of a maternal impression during pregnancy. Such a history can frequently be elicited in the case of nævi, as was exemplified in the case of a giant nævus which I reported some years ago, when I collected several other instances of maternal impression from the literature. A history of a maternal impression in the cases of hereditary tylosis is also mentioned by Bassaget and Jacob and Fulton. It is not improbable that it could have been obtained in many more cases had the matter been thought worth investigation.

Treatment as a rule is unsatisfactory. As the patients generally belong to a very poor class in which æsthetic considerations do not hold an important place, and as the condition is usually painless, treatment is usually not persevered with, as the patients are unwilling to be incapacitated for several weeks by continuous dressings. Although the thickened epidermis can be made to exfoliate by such substances as salicylic acid, resorcin, pumice stone, starch poultices, and strong solution of bicarbonate of soda, it invariably re-forms and the condition becomes as bad as before.

Tylosis possesses an epidemiological interest in that it has been endemic for about 150 years in the small island of Meleda, off the coast of Dalmatia. In a paper published in 1896 a Dalmatian doctor named

Hovorka, who had recently visited the island, described the condition as the macular form of leprosy—an error all the more likely to occur as the disease was known in Meleda by the name of “guba,” the term almost always employed by the Serbs and Croats to designate leprosy. The editor of the ‘Archiv für Dermatologie und Syphilis,’ in which the paper appeared, added a foot-note expressing a doubt as to the diagnosis of leprosy, and in a subsequent paper written in conjunction with the well-known leprosy expert, Prof. Ehlers of Copenhagen, Hovorka admitted his mistake, and came to the conclusion as the result of their conjoint examination that the condition was a distinct disease—mal de Meleda—which had been described in 1826 by Stulli, who stated that it had been known in the island for at least fifty years.

After a visit to Meleda in 1898, Prof. Neumann, of Vienna, gave an illustrated description of three of its inhabitants, all of whom showed a keratosis which was either congenital or had appeared shortly after birth. Two of the cases were brother and sister, and the father belonged to a family in which the disease had existed for 70 years. Unlike most of the cases described the lesions were not confined to the palms and soles, but affected also the elbows, knees, and dorsal surfaces of the hands. Neumann, therefore, prefers the term “keratoma hereditarium” to that of “keratoma palmare et plantare hereditarum,” used by Unna.

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RUBELLA WITHOUT A RASH (RUBELLA SINE EXANTHEMATE).

By G. FLÖYSTRUP, M.D.,
Copenhagen.

It was a long time before rubella was recognised as a distinct disease. Henoch, Heb a and Kaposi have even disputed it in recent times. It is only of late years that it became generally known that rubella in most cases is accompanied by acute swelling and some tenderness of the cervical and occipital glands. In the principal textbooks and manuals from about 1880 and earlier this symptom is not mentioned at all, except by a few authors. In Denmark Oscar Bloch (2) was the first who described the adenitis and its diagnostic value (1882). In recent works the symptom is mentioned, though all authors do not lay the same stress upon it. The general view to-day is that most cases of rubella are accompanied by swelling and some tenderness of the cervical and occipital glands, which are much less pronounced in measles, so that this distinction is one of the most valuable points in the differential diagnosis.

That rubella can also be diagnosed when we meet a patient with acute swelling of the cervical and occipital glands together with the other common symptoms of German measles, but without a rash, is evident from the following case, which I had the occasion of observing very closely, as it happened to my own son:

A boy, aged 9 years, had previously had the other common illnesses of childhood, measles included, and had not suffered from adenitis before. About April the 20th, 1922, he appeared to have numerous little tender

moveable glands, from the size of a pea to a nut, at the sides and back of his neck.

On April the 23rd, in the evening, he had some coryza and slight conjunctivitis, headache, and the symptom, common in children, of indefinite pains in the abdomen. He vomited.

April the 24th : The vomiting and pains in the abdomen have stopped. Condition otherwise the same. In the axillæ and the groins a few swollen glands are also to be felt. On close examination of the patient a very few macules of the size of a pin's head and of a very pale colour are to be found on both cheeks. They are so few and so pale that it is very doubtful if they can be regarded as a rash. In a few hours the macules disappear again, and on other parts of the body the rash is not seen. On the contrary the patient complains of itching in the otherwise apparently normal skin. A slight redness is seen on the palate. The temperature has risen a little.

April the 25th : All symptoms, subjective and objective, except the adenitis, have totally disappeared.

The adenitis disappeared slowly, so that some swelling of the cervical glands could still be felt two and a half weeks later.

This slight and acute illness made me from the first suspect rubella. But I looked in vain for the rash, which is usually so conspicuous in this disease. The very few pale macules that for a few hours could be seen on the cheeks, but nowhere else, did not of themselves permit any diagnosis. But as the patient, with the exception of the rash, had all the symptoms of a mild case of German measles I diagnosed this disease, and felt still more convinced of the correctness of my diagnosis when I learned that some of the boy's school-fellows had suffered from it a couple of weeks before.

The most interesting point, however, was to see whether the patient's three-year-old brother would get rubella later, as one would expect if the diagnosis was correct. I examined him nearly every day, and eight days later found a similar cervical and occipital adenitis that did not disappear again for three weeks. A fortnight after his elder brother's illness he got a typical rubella rash together with the other symptoms of this infection. (He had suffered from measles two years before.) As it was not possible to find another cause of contagion for the little boy, and as his attack began about a fortnight after the elder brother's; as there was rubella in the school previously; as the reported case had all the symptoms of German measles with the exception of the rash and the clinical picture was not like that of any other disease—he had had, as already mentioned, measles two years before—I am convinced that the elder brother's disease was rubella without a rash, the more so because a

rash could have hardly escaped my attention when I was keeping him under observation nearly the whole day and night at home. The object of reporting the case is to show that we are justified in diagnosing rubella when we see a patient without a rash, but with all the other symptoms of German measles, especially the acute cervical and occipital adenitis, consisting of little, tender, soft and moveable glands between the size of a pea and a nut.

That such a rubella *sine* exanthemate—corresponding to morbilli and scarlatina *sine* exanthemate—exists may be regarded as probable, because so many persons stoutly deny having suffered from rubella once in their lives, although they know they have been exposed to contagion. Some of them may really have escaped the infection, but most of them have not escaped but have had a slight attack without a rash, or with a rash so slight and fading so quickly that it has not been observed. But had they been examined at that time then the adenitis and perhaps also the transient catarrh might have been observed and rubella diagnosed.

It might perhaps be interesting in this connection to mention more particularly the significance of adenitis in rubella—especially diagnostically—because the attention paid to it by different observers is so variable. For instance, Romberg (5), in Mering's text-book of 1907, does not mention swollen glands at all, while in the edition of 1913 they are only mentioned casually. Aser (1), on the contrary, says, "Swelling and tenderness of these glands (*i. e.* the cervical and occipital) have been regarded as a pathognomonic sign, but often the symptom is absent; the tenderness especially is ill-marked." Dieulafoy (3) writes that cervical and occipital adenitis is sometimes found, and is a "*signe qu'on a donné comme caractéristique de la rubéole, mais que j'ai noté également dans la rougeole.*" English physicians apparently recognised the adenitis in rubella at an early period and regarded it as of diagnostic importance. For instance, Osler (4) regards it as a frequent occurrence and as one of "the chief points of distinction between *rötheln* and measles."

I have not recorded the cases of rubella I have met with in my practice, but cannot remember a case without enlargement of the glands. On the other hand, these have not always been tender. Oscar Bloch (2) has collected eighteen cases of German measles and found adenitis in them all. It was the same in twenty-five cases which were observed during an epidemic of rubella in Copenhagen in 1897-98 by my father, Dr. A. Fløystrup, who did not publish them, but has now kindly given me his notes for use on this occasion. All the patients had enlargement of some of the cervical and occipital glands during their illness, often of

a considerable degree; the glands were not always tender, but the enlargement lasted in some cases for more than a month, because in some patients it was present more than a week before the rash appeared and persisted several weeks after its disappearance. Rubella, therefore, can often, when contagion is likely, already be diagnosed on the occurrence of that symptom, the diagnosis being confirmed by the subsequent appearance of the rash.

These observations show that cervical and occipital adenitis is a very frequent phenomenon in rubella (while the glands in measles are swollen much less frequently and in a much slighter degree). The enlargement, therefore, must be regarded as of much greater diagnostic importance than is supposed by most of the authors mentioned. The adenitis is all the more valuable diagnostically as it appears about a week before the rash, and so permits us even at this stage—though not with complete certainty—to diagnose rubella, and thereby perhaps hinder the spread of the disease, though this may not always be of great importance in such an inoffensive complaint as German measles usually is.

The object of this note is to show that rubella may exist without a rash, the possibility of which I have not seen mentioned in the literature.

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NOTES OF A CASE OF EXTREME RECURRENT DROWSINESS
IN A CHILD, APPARENTLY DUE TO HEPATIC DISTUR-
BANCE.

By JOHN THOMSON, M.D.

INSTANCES of extreme drowsiness arising from epidemic encephalitis have become relatively common of late, and the symptom has attracted a good deal of attention. A short record of the following case, in which profound and prolonged drowsiness of obscure causation recurred periodically for years, may therefore be of sufficient interest to warrant publication. The fact that the child's liver was considerably enlarged suggests that the symptoms may have been due to recurring hepatic disturbance. Whatever its cause, the condition is certainly a very uncommon one. I have never seen, or read of, a case at all resembling it.

CASE.

On October the 15th, 1906, David E—, a boy, aged 5 years, was brought to see me by Dr. Elliot Dickson on account of recurrent attacks of dropping off to sleep in the daytime.

The patient was the youngest of three boys, the others being in good health. His parents were also healthy, but his father was said to have a "slowly acting liver." None of the child's relatives had suffered from drowsiness, or from any other nervous symptom.

Clinical history.—He had been a healthy baby—on the breast for about twelve months—and had not been noticed to sleep longer or more soundly than other infants. Shortly after he was weaned his first attack of drowsiness occurred. He was apparently in good health at the time.

The characters of this attack were exactly the same as those noticed on subsequent occasions during the next five years. The drowsiness set in suddenly without any warning. At the onset the child's hands were noticed to be hot and his face cold and clammy, but there was no rise of temperature, no quickening of the pulse, and no sweating. On a few occasions vomiting occurred, but usually there was none.

Wherever he was—in the house, at school, or outside—he would suddenly say "I am tired," lie down on the floor or on the road, and fall sound asleep. He was put to bed, and generally slept *for three days on end*, waking once, or sometimes twice, in 24 hours to ask for a drink of water and to empty his bladder. He would then fall sound asleep again within a minute or so. While his sleep lasted he refused all solid food, and his bowels did not act. His bladder was occasionally found by Dr. Dickson to be very greatly distended, but the child had no difficulty in emptying it when roused to do so. The urine was normal. His sleep seemed to be of an ordinary healthy character.

The second attack occurred three months after the first. Later the intervals became gradually shorter, till, when the boy was three years old, he was having one about every three weeks. Thereafter they decreased in frequency, and the attack in which I saw him was the first he had had for six months.

He was said to be perfectly well and happy during the intervals. There were no indications of indigestion, and he looked and behaved like an ordinarily healthy little boy. His appetite was good, and the action of his bowels regular and normal in every way.

On the morning of the day on which I saw him he vomited and fell asleep as usual. His parents brought him from Fife by train, so that he had been a good deal disturbed by the time I saw him.

I found him looking very ruddy and healthy, but extremely drowsy, like a child that had been up all night and wanted to be let alone. The only abnormal points found on examination were a thick brown fur on the tongue, a definite increase of the cardiac dulness to the right, with visible epigastric pulsation, and an enlargement of the liver (3 fingers' breadths), which was quite soft. There was no cardiac murmur. The spleen was not enlarged. He was ordered a mixture of bicarbonate of soda, nux vomica and infusion of gentian thrice daily five days a week, and on the other two days a few small doses of calomel (gr. $\frac{1}{6}$); also two grains of calomel were to be given at once if there were any signs of an attack beginning. This treatment was continued for six months.

In the following year he had two or three attacks, and then they ceased altogether. Since then he has had no return of his symptoms, and no other illness of any kind, and he is now a strong athletic youth aged 21, with a clean tongue and a normal heart and liver. He is a competent motor engineer and an enterprising motor cyclist. He never suffers from drowsiness during the day, but his mother has still, at times, to use violent measures to make him get up in the morning.

RAYNAUD'S SYNDROME IN A NON-SYPHILITIC INFANT, WITH A REMARKABLE FAMILY HISTORY.

By F. PARKES WEBER, M.A., M.D., F.R.C.P.

THE patient, Netta M—, aged 12 months, of an originally Russian-Hebrew family, was admitted to hospital under my care on September the 20th, 1922, suffering from recurrent attacks of Raynaud's syndrome. The attacks had first been noted at the age of 3 months, and since then had recurred on the average every other day. Sometimes one hand or one foot would be affected, sometimes both hands or both feet, sometimes three extremities together would be more or less cyanotic. Sometimes the cyanosis passed from one extremity to another. The attacks were always of the cyanotic kind ("local asphyxia") and lasted mostly five to six hours, but sometimes the duration of the attack had been obviously shortened by the local application of warmth. The severe attacks were undoubtedly accompanied by considerable local pain.

The child was moderately fat, had adenoid vegetations of the nasopharynx, and frequently a muco-purulent discharge from the nostrils, but otherwise, in the intervals between the Raynaud attacks, presented no definite signs of disease. The urine was free from albumin and sugar and there was no history of hæmaturia or hæmoglobinuria. Dr. E. A.

Cockayne kindly informed me that the child had been previously in the Great Ormond Street Children's Hospital, and that her blood-serum had there been found to give a negative Wassermann reaction, and that a negative Wassermann reaction had likewise been obtained in her mother.

According to the mother's account the child was born at full term without instrumental help; the confinement was normal. She was breast-fed for the first six weeks of life, and then was partly bottle-fed, partly breast-fed. Lately the diet had been a varied one.

The patient is the only child of her father, Simon M—, by his second wife. By his first wife, who died of influenzal pneumonia during the severe epidemic of 1918, he had one child, a girl, now aged 7 years, who is said to have enlarged tonsils and to be inclined to bronchitis. Neither of the wives had had any miscarriages. The father himself, now aged 30 years, has been known to me since July, 1911, when he was aged 19 years. He formerly had a slightly enlarged spleen, and used to suffer from recurrent attacks of headache and vomiting. In 1917 I could still feel the spleen slightly enlarged and he still had occasional attacks of headache and vomiting, but now I cannot make out any splenic enlargement, and since 1917 he has been practically free from headache and vomiting. He was found in 1911 to have a negative Wassermann reaction.

A brother (Harry M—) of the patient's father is now aged 24 years and is said to have formerly suffered from bronchitis and asthma. Another brother (Alexander M—) and a sister (Leah M—) were known to me. They were aged 19 and 17 years respectively in 1919 when they were both suffering from diabetes mellitus. They both died in 1920.

The patient's paternal grandfather, a Russian Jew, Marks M—, now aged 58 years, has been known to me since May, 1906, when he was suffering from "thrombo-angiitis obliterans" (non-syphilitic obliterating arteritis of Hebrews), the first symptoms of which dated from when he was only 38 years old. Though both his lower extremities and one upper extremity are affected no amputation has been required, and he can get about on his legs for short distances in spite of his "intermittent claudication." I described his case in the 'Lancet,' 1908, i, p. 152, and 1913, i, p. 169, and in the 'Quarterly Journal of Medicine,' Oxford, 1916, ix, p. 289. His blood-serum has been examined on various occasions, and has always been found to give a negative Wassermann reaction.

The patient (Netta M—) remained in hospital under my care from September the 20th to November the 17th, 1922. We found that during an attack the affected part was at first blue, cold to the touch, and obviously painful. This cyanotic stage of "local asphyxia," as the attack passed off, was succeeded by one of reaction, with active hyperæmia, and during that stage the part became bright red and hot to the touch;

then all traces of the attack rapidly disappeared completely. It was found that the attacks could be cut short by the application of a rubber hot-water bottle—a method of treatment that was evidently much appreciated by the child herself. The affected extremity was covered with a woollen blanket between two linen sheets and the hot-water bottle was placed over this covering. The internal use of benzyl-benzoate seemed to diminish the angiospastic condition. The attacks became less severe, shorter, and less frequent. A 20 per cent. alcoholic solution was employed, at first 1 minim and then 2 minims, in water, three times daily, but the complete cessation of the attacks for a time during the latter part of October may have been connected with the temporary occurrence of slight febrile bronchitis. The adenoids will probably be treated by operation.

A CASE OF CONGENITAL ANEURYSM OF THE PULMONARY ARTERY.

By G. A. SUTHERLAND, M.D., F.R.C.P.

IN a recent number of this journal (1), amongst some clinical records, Case 3 is that of a child, aged $3\frac{1}{2}$ years, who suffered from a succession of heart attacks, and whose condition was ascribed to aneurysm of a basal artery. It was thought that the aneurysm was probably in the ductus arteriosus or the pulmonary artery. As the post-mortem findings are now available it may be of interest to put them on record.

The patient lived for another six months, dying at the age of 4 years. During the first three of these months she was able to be out of bed and had only one "heart attack," but she was never inclined to take much exercise. During the last three months there were progressive signs of cardiac failure in the form of increasing breathlessness and œdema of the lungs and extremities. Towards the end there was great enlargement of the right side of the heart with cyanosis.

At the necropsy both lungs were found to be pushed back by an enlarged pericardial sac. They were pale in colour, crepitant throughout, fully expanded, and slightly œdematous. The pericardial sac was enlarged and contained an excess of free fluid, but there was no pericarditis. The heart was very much enlarged, this condition being due to hypertrophy of the right ventricle and to enormous distension of the right auricle. The wall of the right ventricle was as thick as that of the left. At the base of the heart a large aneurysm was found occupying the position of the main pulmonary artery. This vessel was three times the size of the aorta and measured $1\frac{1}{2}$ in. in diameter. The pulmonary opening was

normal, and on introducing a finger the aneurysm, which arose about $\frac{1}{8}$ in. from the opening, was found to be entirely filled with firm blood-clot. The aneurysmal dilatation extended through the whole length of the main pulmonary artery and the left pulmonary up to the point where it entered the lung. The right pulmonary artery was apparently normal. A firm thrombus extended along the whole length of the aneurysm and fully occupied the lumen, so that finally the circulation through it must have been entirely blocked. A cross-section of the left pulmonary artery as it entered the lung showed it to be occupied entirely by yellow laminated clot. The ductus arteriosus was identified as a thin fibrous cord which was not involved in the aneurysm. The other cardiac valves and the musculature of the heart presented no signs of disease.

In the absence of any general or local disease in this case the aneurysm must be ascribed to some congenital defect in the pulmonary artery. In this connection it may be noted that other congenital defects were present in this patient. In the left foot there was a supernumerary toe, the fourth and fifth digits were fused, and there was a double nail on the fifth digit.

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SUDDEN DEATH FROM BLOCKING OF THE AIR-PASSAGES BY A CASEOUS GLAND IN A BOY OF NINE YEARS.

By F. JOHN POYNTON, M.D., F.R.C.P.,

and

W. WILLIAMS, L.R.C.P., M.R.C.S.

A BOY, aged 9 years, was admitted to University College Hospital on September the 20th, 1922, for cough, fever and pain in the right side.

He had been in a fever hospital from December, 1921, to the following September for scarlet fever and nephritis, from which he had made apparently a good recovery. From the hospital he went down to the hop-fields, where his present illness began.

Two days before admission he had headache, cough and pain in the right side.

On admission the boy was flushed, but not apparently very ill or much

distressed. Temperature 102° F., respirations 40, pulse 112. There was impairment of percussion note and air entry over the right lower and middle lobes, and two days later an area of tubular breathing below the angle of the right scapula. The cough was hacking and without expectoration.

The condition, though acute, seemed to be satisfactory, except that the temperature was hectic in type, swinging from normal to 104° F.

The fourth day of the illness at 7 a.m. in the morning the boy had a violent fit of coughing, which was extremely hard and dry. All attempts at relieving this were ineffectual, and after persisting for half an hour he became cyanosed with increasing dyspnoea and collapse. At 8 a.m. the breathing was slow and shallow, without stridor or expectoration, and he died at 8.15 a.m.

The post-mortem examination showed 2 oz. of turbid fluid in the right pleural cavity and a thin film of fibrinous exudation over the lower lobe of the right lung, which was consolidated and also contained areas of tubercular softening. There were a few miliary tubercles scattered throughout this lung.

Below the right bronchus there was a cavity two-thirds of an inch in length surrounded by a fibrous capsule with shaggy walls. This cavity communicated with the bronchus, in the upper part of which and in the lower half inch of the trachea was impacted a caseous mass which was evidently a caseous gland.

Deeper in the hilum of the lung there was a second caseous gland about an inch in diameter, which was suppurating and had perforated into one of the medium-sized bronchial tubes.

The other details of the examination were of no particular interest.

The rarity of such a distressing termination to a case which clinically seemed of no extreme gravity and its interest to those engaged in the study of affections of lymphatic glands makes this, we believe, a case worthy of publication.

ALBUMINURIA IN A FAMILY OF CHILDREN.

By HAZEL H. CHODAK GREGORY, M.D., M.R.C.P.,

Physician to Out-patients, Royal Waterloo Hospital for Children and Women.

THE following record of a family of four children suffering from nephritis, two at least of whom were born with albuminuria, is probably uncommon, as I have been unable to find any mention in the literature of albuminuria occurring in families.

Frank M—, the eldest, was brought to the Royal Free Hospital at the age of four, suffering from a typical attack of acute nephritis. There was no history of scarlet fever. The attack was severe and the child died after about three weeks' illness. At the autopsy the kidneys were found to be in a state of acute inflammation, but no special investigations were made.

Winifred M—: A few weeks later the mother brought the second child, a girl, aged 2 years, because she had noticed puffiness round the eyes and thought the child might be suffering from the same disease. The urine was found to contain a thick cloud of albumin, but the child at that time had no symptoms other than the mild degree of oedema complained of. She was kept under observation, and a few months later developed an acute attack of nephritis and was admitted into hospital. She recovered, and since then has had two more attacks; she is now just convalescent from the last one. She is not very well grown for her age, but is fairly well nourished and looks a normal child. Only on one occasion during the last two years have I known her urine to be free from albumin, and during the acute periods there are blood and casts.

Jessie and Patricia M—: Warned by previous experiences the mother was on the look-out for further trouble, and three weeks after her twins were born she brought up specimens of urine and a complaint that one of them, Patricia, had puffy eyelids. Both specimens contained albumin in far greater quantity than is seen in the occasional mild albuminuria of the newborn. In the case of Patricia, an acute attack occurred at the eighteenth month, broncho-pneumonia complicated the disease and the child died. At the autopsy the changes in the kidneys were apparently no different from those of an ordinary acute nephritis.

The other twin, Jessie, continues to have a mild degree of albuminuria, but she has had no acute attack and seems to be a very healthy child.

Recently a fifth baby has been born—and has no albuminuria. With regard to the ætiology one's first thought is syphilis, but there is nothing to substantiate such a diagnosis. The Wassermann reactions of the mother and the three younger children are negative (the boy's was not tested). No history can be obtained nor are there any other signs of congenital syphilis. The urines of both father and mother are free from albumin.

Royal Society of Medicine.

SECTION FOR THE STUDY OF DISEASE IN CHILDREN.

Friday, April the 28th, 1922.

The President, SIR ROBERT JONES, K.B.E., in the Chair.

The Treatment of Paralysis in Children.—SIR ROBERT JONES emphasised the importance of a closer affiliation between physician and surgeon, the applied knowledge of each being essential to the scientific conduct of a case. It would be to the common good if physicians and surgeons in teaching hospitals with their students could meet in common in the wards. Paralysis in children required the close association of neurologist and surgeon. Poliomyelitis, the most common, need not be attended by paralysis, which was incidental, not essential. Lumbar puncture was necessary to establish the diagnosis, it was the only way to secure the isolation of the abortive case, it secured rest in the pre-paralytic stage, and it was also of benefit in the acute stage. The acute stage lasted about six weeks, the second stage lasted two years, and was followed by the third or chronic stage, when all the recovery to be expected had occurred. From the onset of the disease to the end of the second stage it was important to avoid meddling methods. During the stage of onset one must trust entirely to rest, and even then protect the weak muscles and obstruct the coming of deformity. While active mischief was present in the cord electricity and massage should be avoided. In the second stage it was important to keep the paralysed muscle relaxed until the occurrence of recovery. As recovery progressed relaxation should be gradually lessened, according to the patient's ability to use the muscle in the extended range. Deformities should be corrected by splint and bandage. Except in extreme instances the knife was never needed. As soon as the patient was made stronger, the development of his muscles should be attended to by massage, muscle re-education and electrical stimulation. In the third stage the correction of deformity was essential. There was no reason for paralysis being allowed to be followed by deformity, except scoliosis. Splints were used with three objects: the prevention of deformity, the correction of deformity, and to assist the function of the upper arm or locomotion in the lower limb. Operations were of two types—(1) to stabilise the skeleton, (2) to restore muscular balance. Every case represented a separate anatomical problem. Tendon transplantation was not indicated unless there were normal tendons to transplant. Nerve transplantation was no longer practised.

Purpura Fulminans following Measles.—DR. E. H. KELLY (see BRITISH JOURNAL OF CHILDREN'S DISEASES, 1922, xix, p. 86).

Friedreich's Ataxia Associated with Double Coloboma of Iris and Choroid.—DR. D. McALPINE showed a boy, aged 6 years, with this condition. At two years of age he was found to have a very unsteady gait, and he had made very little improvement since then. The patient had double pes cavus and right talipes equino-varus. The knee-jerks were extremely sluggish and the ankle-jerks absent. The Wassermann reaction was negative in the blood and cerebro-spinal fluid.

Familial Cerebral Degeneration.—Dr. D. PATERSON showed a male infant, aged 6 months, who took no notice of his surroundings and seemed to be going backward. The parents were healthy and were not Jews. There had been eleven pregnancies and no miscarriages, but eight had died, one prematurely, and the other seven with a similar condition to that of the patient. The child was healthy at first, but at the age of 3 or 4 months he developed the same symptoms as the other children. He was not spastic, the discs were normal and the Wassermann reaction negative. There was slight external strabismus. X rays showed rachitic bone changes. *Post-script*: The child died and an autopsy was made on May the 1st. No gross changes were found. Sections were being made for microscopical examination.

Congenital Morbus Cordis associated with Coloboma of Iris and Choroid.—Dr. D. McALPINE showed a girl, aged 11 years, with this condition. The apex-beat was outside the nipple line in the fifth space, and there was a loud systolic murmur in the pulmonary area. Red-cells 4,500,000. Wassermann reaction negative. The position of the apex-beat indicated the presence of rheumatic myocarditis in addition to patent ductus arteriosus.

May the 26th, 1922.

The President, Sir ROBERT JONES, K.B.E., in the Chair.

Right-sided Hemi-hypotrophy from Congenital Spastic Hemiplegia, with Changes of the Left Side of the Brain shown by Röntgen Skiagrams.—Dr. F. PARKES WEBER showed a woman, aged 22 years, with right-sided congenital spastic hemiplegia, sexual infantilism, and a very wide-spread vascular nævus, chiefly of the superficial port-wine stain type. The right limbs were shorter than the left. The patient was obese and bulky. The left eye was larger than the right (buphthalmos) owing to congenital glaucoma. There was a brownish pigmented nævus of the upper part of the left iris (heterochromia iridis). Skiagrams showed that the skull was prognathous—of the Simian type. The frontal sinuses were very large. The sella turcica was extremely small. The left half of the brain appeared sclerosed, and occupied only about two-thirds of the left half of the cranial cavity, being surrounded by cerebrospinal fluid (external hydrocephalus).

Dr. Weber said that this was the only case on record of a cerebral lesion of this kind being demonstrated by ordinary skiagrams (without the letting out of cerebrospinal fluid and its replacement by sterilised air or oxygen). The congenital cerebral disease was very probably connected in some way with the presence of a vascular nævus of the meninges or brain on the left side—of the same nature as the extensive vascular nævus on the body. The buphthalmos was also probably in the same way connected with the nævus condition. The sexual infantilism and obesity were probably due to the infantile size of the pituitary fossa, as revealed by X-ray examination.

Case of Imbecility due to Congenital Hydrocephalus.—Dr. W. M. FELDMAN showed a girl, aged 6 years, a first child born at full term. There were no previous or subsequent miscarriages or abortions, and no other evidence of syphilis, but a Wassermann test had not been made on

the parents. There was no family history of nervous or mental disease, except that the father had had a slight stammer ever since 5, and a brother of the patient, aged 5 years, could not yet talk, though normal in other respects. The patient's head had been very soft since birth, with large separations between the bones. The fontanelle closed at two years. There were frequent convulsions from six months to two years. Her mental and physical development had been very backward since birth. The circumference of the head was $19\frac{3}{4}$ in. There were no congenital deformities. She could not sit up till the age of $2\frac{1}{2}$ years, and first walked at 4 years. Her legs were still very weak, except when she had a course of thyroid, which considerably strengthened them. She understood but could not talk. She was very obstinate and cross.

Case of ? Tumour of Suprarenal Cortex.—Dr. H. CHODAK GREGORY showed a boy, aged $2\frac{1}{4}$ years. He was a large plethoric-looking child, with much fat and also exaggerated muscular development. Circumference of head 22 in. No tumour could be felt in the abdomen. External genitals normal. Wassermann reaction negative. Mental condition precocious. Appetite enormous. Concentrated carbohydrate feeding had not produced glycosuria. Pituitary gland (anterior lobe) had been administered, but without effect.

Two Cases of Congenital Hemi-hypertrophy.—Dr. D. PATERSON and Mr. F. N. REYNOLDS.—Case 1: Female infant, aged 6 months. She was the only child, and had had no previous illnesses. The whole of the left side of the body was larger than the right. The skull showed no definite asymmetry; the zygoma, ear and cheek were all enlarged on the left side. The left breast and thoracic muscles were better marked than on the right side. The left arm and leg were distinctly enlarged. X-rays showed a definite thickening and hypertrophy of the bones of the leg. No other abnormalities were present. Case 2: Girl, aged 13 years. This was a case of hemi-hypertrophy affecting part of the right side of the face. The parts chiefly affected were the malar bone and the superior maxilla with the soft tissue covering them. The temporal bone and muscles were affected to a less extent, as were also the lower jaw and the masseter muscle. The teeth in the right upper jaw, especially the two back molars, were very much larger than any others in the mouth. X rays showed a general enlargement of all the bones of the skull. The rest of the body was unaffected, and the child seemed quite normal mentally and physically. There was no history of trauma at birth. There were five other children, none of whom showed any abnormality. The patient was the youngest but one. The speakers alluded to the cases of hemi-hypertrophy reported by Hutchison (*BRITISH JOURNAL OF CHILDREN'S DISEASES*, 1904, i, p. 258; 1916, xiii, p. 233), Carpenter (*ibid.*, 1906, iii, p. 63), Higgs (*ibid.*, 1909, vi, p. 503), Black-Milne (*ibid.*, 1920, xvii, p. 79), Hall (*ibid.*, 1921, xviii, p. 21), and others.

Case for Diagnosis.—Mr. B. WHITCHURCH HOWELL showed a boy, aged 8 years, who had limped since he began to walk, at the age of 2 years. He was the last of six children, and was born when his mother was forty-six, there being an interval of twelve years between the fifth and sixth child. Labour was normal. There were no previous illnesses of note. The limp had been getting worse lately, but there had never been any pain. The right lower limb was $\frac{1}{2}$ in. longer than the left. There was slight talipes equino-varus,

with contracted plantar fascia, tendo Achillis and extensors with sustained extensor response; knee-jerks +, gait slightly spastic. Intelligence about the average. Wassermann reaction not yet obtained. Skiagrams of hips and pelvis negative.

Case of Dermato-Polynuritis.—Drs. H. THURSFIELD and D. PATERSON alluded to their previous case (*vide* BRITISH JOURNAL OF CHILDREN'S DISEASES, 1922, xix, p. 27), and reported another in a female child, aged 11 months. She was the sixth child, all the others being alive and well. She was breast-fed up till seven months and was quite well up till that time. She then commenced teething and seven teeth came through at once. Since then she had been fretful and seemed to be in pain. She had gradually become weaker and had marked sweating of the whole body. Six weeks ago a rash appeared on the hands and feet, fading at the wrists. The hands and feet were red, puffy and peeling, and extremely irritated. The hair came out in patches. Insomnia was persistent and she looked a picture of misery. The eyes appeared normal and the knee-jerks were absent. There was no definite anæsthesia of the extremities. She was unable to bear her weight on her limbs. The insomnia persisted in spite of full doses of chloral. The temperature was now normal.

Provincial Meeting held at Oxford June the 30th–July the 1st, 1922.

Dr. E. CAUTLEY, *Vice-President, in the Chair.*

Cases of Mongolism and Cretinism.—Dr. W. A. P. WATERS, who showed several cases, asked for information on the thyroid treatment for Mongolism.

Drs. MURRAY, BLIGH, PRITCHARD, BELLINGHAM-SMITH and the CHAIRMAN took part in the discussion.

Although it was suggested that small doses of thyroid over a long period had a beneficial effect on Mongols, the bulk of the opinion was to the effect that thyroid had no action whatever. There appeared to be some evidence that Mongolism had become commoner since the war, and several cases were quoted in which the typical ætiology of a late pregnancy in an elderly woman was notably absent.

Chronic Interstitial Keratitis, Atrophy and Spasticity of the Left Leg.—Dr. A. G. GIBSON.—The patient was a girl, aged 6 years. There had been one other child, premature, who had died seven years ago. In 1916 the patient attended hospital for discharge from the eyes, and in 1921 she suffered from interstitial keratitis. The Wassermann reaction was + + + +. She was treated for six months with small doses of novarsenobillon intravenously and grey powder, and the grey powder had been continued since. In December, 1921, she had slight talipes equino-varus. In May, 1922, the left leg was wasted below the knee, showing loss of power in the tibialis anticus and increase of tone in the quadriceps and calf muscles. There was no loss of sensation. Present condition: Healed interstitial keratitis in the right eye. Wasting of the left leg below the hip, with slight loss of power. Early talipes equino-varus in the left foot. Increase of all deep reflexes in the legs. No clonus obtained. Plantar response extensor on both sides. Sensation good. Left foot colder than

the right. Gait spastic in left leg. Cranial nerves, arms and trunk normal. Diagnosis: Localised syphilitic myelitis of lumbar region of cord.

Case of Leucodermia.—Dr. A. G. GIBSON.—The patient was a girl, aged 12 years, whose skin condition had appeared two years ago. The Wassermann reaction was negative.

Case of Myelocytic Leukæmia.—Dr. G. KERR CROSS.—The patient was a girl, aged 12 years. Under X-ray treatment, which commenced three years ago, the spleen had diminished in size, and the leucocytes had fallen from 225,000 to 35,000 with a corresponding improvement in health.

Case of Obesity of ? Supra-renal Origin.—Dr. G. KERR CROSS.—The patient was an extremely fat girl, aged 14 years, weighing 15 st. 5 lb. No tumour of the pituitary was seen on X-ray examination, and nothing abnormal was found to account for the condition.

Case for Diagnosis.—Dr. G. KERR CROSS showed a female infant, aged 14 months, fed on cow's milk and barley-water, who had been ill eight weeks with diarrhoea, vomiting and wasting. There was slight bleeding from the gums, and there were small hæmorrhages in the abdominal wall and on the dorsum of the feet. A tentative diagnosis of scurvy rickets had been made.

Dr. CAUTLEY, who objected to the term "scurvy rickets," stated that the condition was a terminal phase in many acute diseases, such as seasonal diarrhoea, vomiting or malnutrition. The prognosis was bad.

Case of "Permanent" Tracheotomy.—Dr. G. KERR CROSS showed a girl, aged 6 years, on whom tracheotomy had been performed for laryngeal diphtheria $3\frac{1}{2}$ years ago. During the following years many unsuccessful attempts were made to remove the tube. Finally suggestion was tried. A lobster-tailed tube was used, and for two weeks only the guard was tied round the neck. The patient did not notice the absence of the tube, and had continued to breathe through the mouth since last April, when the guard was removed.

Cases of Intussusception.—Mr. H. WHITELOCKE reported 11 cases of intussusception in children, aged from 3 months to 14 years. There was no death in the series, which included one case of resection of the ileum in a boy, aged 14 years.

Two Cases of Bone Regeneration after Osteomyelitis.—Mr. A. P. DODDS-PARKER showed (1) a specimen from the diaphysis of a femur which he had resected subperiosteally in a girl, aged 9 years, in 1915. (2) A boy, aged 7 years, in whom a large portion of the shaft of the tibia had been resected for osteomyelitis. The gap had been twice grafted with a graft from the opposite tibia, the second being successful.

Case of Persistent Stridor.—Mr. F. G. GARDNER showed a girl, aged $5\frac{1}{2}$ years, who a short time after removal of tonsils and adenoids developed inspiratory stridor, which had persisted ever since, almost without intermission, day and night. Laryngoscopic examination was negative. The voice was hoarse and the timbre almost adult in quality. There appeared to be slight difficulty in swallowing, and some dribbling took place. The tongue showed fine tremors, and the mucous membrane was thrown into

folds suggesting muscular atrophy. There were no abnormal signs in the chest.

Practical Methods of the Treatment of Infantile Paralysis in Children.—Mr. G. R. GIRDLESTONE demonstrated some of the methods of splintage, posture treatment, and of application of simple walking appliances used in the Wingfield Orthopædic Hospital, Oxford, and its surrounding out-patient clinics. The demonstration was intended to be in some degree a supplement to the address on the treatment of infantile paralysis given by the President (*vide* BRITISH JOURNAL OF CHILDREN'S DISEASES, 1923, xx, p. 3).

SECTION OF DERMATOLOGY.

Case for Diagnosis.—Dr. W. JENKINS OLIVER showed a girl, aged 7 years, in apparently good health, in whom the skin lesions were apparently confined to the back and right flank, and consisted of five round and irregularly quadrilateral erythematous macules, some of which showed fine scaling. The lesion on the back of the right shoulder differed from the others in being darker in colour, of a slightly bluish tint with a white shade in the centre. Over this, the oldest macule, there was on palpation the suggestion of a lack of suppleness of the skin, which was not apparent over the other lesions. The duration of the various lesions had been: (1) Back of right shoulder, 18 months; (2) small round patch on left side of spinal column over scapular region, 15 months; (3) one round and one large irregularly shaped area extending on to the left flank, about 10 months; and (4) irregular quadrilateral lesion over right sacro-iliac region, 4 months. Since their first observation the spots had appeared to become larger, especially the one in the right flank. The oldest one on the right scapula had always been different from the others, with its white centre. There was no history of trauma or of drug-taking, neither the patient nor the parents had been abroad, and there was no apparent alteration of sensibility over any of the macular patches, while the child complained only of some occasional irritation about them. Dr. Oliver suggested a diagnosis of localised sclerodermia.

Dr. H. G. ADAMSON (President) said that this type of sclerodermia with one or more oval patches generally on the back was not uncommon in children. They were sometimes associated with erythematous patches or urticaria, and more rarely with fluid in the joints—evidence perhaps of a general toxæmia. In the present case the erythematous patches were an early stage of sclerodermia. The prognosis in this type of case was good. No form of treatment had any good result, but the sclerodermia patches often disappeared spontaneously in course of time.

Two Cases of Favus of Smooth Skin.—Dr. E. G. GRAHAM LITTLE.—The patients were a boy, aged 6 years, and a girl, aged 8 years. The former had a patch of favus on the chin, the latter one on the right ear. Both had become very much better with the use of boracic ointment. The ear lesion had almost entirely dried up. The favus fungus was very obviously present in the lesions. The source of infection could not be determined.

Case of Darier's Disease.—Dr. H. W. BARBER showed a boy, aged 11 years. Neither parent had any chronic skin disease. The eruption began

more than six years ago. It appeared first on the backs of the hands and on the extensor surfaces of the legs. The face had become affected only recently. The eruption involved chiefly the backs of the hands and wrists, the forehead, temples and side of the nose, the neck, the legs below the knees, the groins and axillæ. On the forehead crusting had occurred, but the scalp was only slightly affected. The lesions on the hands and wrists resembled flat warts, and on the face the greasy appearance and follicular involvement were well seen.

Case of Adenoma Sebaceum.—Dr. H. C. SEMON showed a girl, aged 13 years, who had developed soft, closely aggregated, raised, yellowish-pink waxy lesions in the naso-labial grooves and symmetrically on the cheeks. When 5 years old small telangiectatic stigmata were also to be seen, and there was a flat warty mole in the left frontal region. To complete the picture of the Pringle type, the child was very poorly developed mentally, could remember nothing of what she was taught at a special school, and had suffered frequently from epileptiform seizures from an early age. An uncle on the father's side was said to have died in a fit after many attacks. Microscopic sections showed embryonic hair-follicles, sebaceous and sweat glands. The Weigert stain showed the sparsity of elastic fibres, and the whole histological appearance strongly suggested the nævoid origin of the disfigurement. It was proposed to destroy the lesions individually, in a number of sessions, by means of the electric cautery.

Epidermolysis Bullosa.—Dr. W. F. R. CASTLE showed a mother and her baby with this condition. The disease could be traced through four generations, the great grandfather, grandfather, mother and child being affected. The mother was one of eight children, all of whom were affected except the second and seventh. The second and seventh were both married, and their children were healthy. The sixth and eighth were both married but had no children. The woman's eldest child, a boy, was born normal, but died shortly afterwards from "blisters." The second child, a daughter, was stillborn, and was covered with blisters. The third was normal. The fourth, a girl, suffered from amenorrhœa and had mental symptoms. The mother of the child had well-marked lesions on her legs, and her Wassermann reaction was triply positive. Her blisters ceased immediately after the birth of her child. The child also showed blisters and small white bodies on the fingers. The mother's nails were badly affected.

Société de Pédiatrie, Paris.

March the 21st, 1922.

Attempts at Desensitisation in Vomiting, Diarrhœa and Eczema.—M. MARCEL MAILLET reported that he had found that in breast-fed infants small doses of peptone given before the feeds checked the vomiting, though they did not have any permanent effect, and that eczema was improved by ingestion of small quantities of milk before breast-feeding. In the bottle-fed infant constant vomiting was not affected, but diarrhœa and eczema might be improved by desensitisation.

Mongolian Imbecility; Probable Hereditary Syphilis.—MM. BABONNEIX, BLUM and SÉMELAIGNE showed a girl, aged 12 years, whose father, aged 65, had chronic aortitis, though the Wassermann reaction was negative and there was no history of venereal infection. The child had been born at the seventh month, and labour had been difficult. The speakers suggested that syphilis might give rise to Mongolism, either by producing cerebral agenesis or chronic encephalitis, or by disturbing the normal development of the brain indirectly through the endocrine glands. In some instances, as in the present case, there might be an association of hereditary syphilis and obstetrical trauma.

Mongolism in Congenital Syphilis.—M.M. BABONNEIX and RAMUS showed a male infant, aged 23 months, whose father had been treated for syphilis on several occasions and had a positive Wassermann reaction. The mother had a large goitre but was otherwise healthy. The infant presented a typical picture of Mongolism with extremely marked atony as in Oppenheim's disease.

In the subsequent discussion M. COMBY remarked that there was a tendency to exaggerate the importance of congenital syphilis in the production of Mongolism. In only 3 out of 79 cases of Mongolism which had come under his observation was there undoubted syphilis in the father or mother; in 4 cases the mother had had 2 or 3 miscarriages, and in 6 cases the birth of the infant had been premature.

Intermittent Cyanosis due to a Complex Congenital Malformation of the Heart.—MM. J. RENAULT and P. BLUM showed the heart of a female infant who died at the age of 9 months after having been subject to attacks of cyanosis for a month. On clinical examination there was no thrill and no displacement of the heart, but a systolic murmur was heard all over the præcordium. The red cells numbered 5,160,000, the leucocytes 20,000, and the hæmoglobin was 80 per cent. Death took place six weeks after admission to hospital. At the autopsy the heart showed the following lesions: (1) hypertrophy of the right ventricle; (2) opening of the aorta into the right ventricle; (3) circular stenosis of the whole trunk of the pulmonary artery; (4) communication between the two ventricles; (5) existence of an enormous right auricle communicating with both ventricles; (6) atrophy of the left auricle and left ventricle; (7) persistence of the foramen ovale. There was no evidence of syphilis or tuberculosis in the mother to account for the condition, and she had probably had some mild infection, which had escaped notice.

Asphyxia from Vomiting in a Weakly Infant.—MM. CASSOUTE and VIGNOLI stated that cases of this kind were very rare. The patient was a male infant, aged 3 days, who died in a few moments after an attack of vomiting. At the autopsy the lungs were dilated and œdematous, there were large and small subpleural hæmorrhages such as were frequently found in the newborn who died of rapid asphyxia. On section the bronchioles gave issue to a serous fluid containing yellow particles of food, which were also found in the large bronchi, trachea, nasal fossæ and mouth, as well as in the stomach and intestine.

Subacute Tetanus; Serum Treatment; Recovery.—MM. CASSOUTE and A. CRÉMIEUX reported the case of a girl, aged 5 years, who

about a month after getting abrasions on both knees, especially the left, had some difficulty in walking and in her movements of the lower limbs, especially on the left side. A few days later she had great difficulty in opening the mouth and contracture of the abdominal muscles. The upper limbs escaped. Meningitis was excluded by the absence of Kernig's sign and the normal character of the cerebrospinal fluid, tetany by the absence of Chvostek's and Trousseau's signs and the absence of contractures in the upper limbs, and neuropathic contractures by exaggeration of the reflexes and patellar clonus. The patient was given 240 c.c. of tetanus antitoxin in the course of a fortnight, and complete recovery took place.

Scurvy in a Young Dog.—Miss K. GAMGEE, of Hull, reported the case of a Brussels Griffon, aged 9 months, which had been fed on Horlick's malted milk and Brand's essence without any meat or any raw or fresh food. The dog seemed languid and had no appetite. The diagnosis of tuberculosis had been made by several London veterinary surgeons. The gums, however, were red and swollen, and the animal was unwilling to walk and seemed to have pain in the right hind leg. A diagnosis of scurvy was made and an antiscorbutic diet ordered, consisting of 2 teaspoonfuls of orange-juice 3 times a day, and potato skin with a little raw milk once a day. Within 3 days the animal's appearance completely changed. He developed an enormous appetite, gained three-quarters of a pound in a week and made a rapid and complete recovery.

Meningococcal Cerebro-spinal Meningitis Complicated by Streptococcal Infection.—MM. H. BARBIER and LEBÉE reported the case of a boy, aged 8½ years, admitted to hospital with cerebrospinal meningitis due to meningococcus B. Slight improvement followed injection of specific serum, but an aggravation of the condition occurred in a few days, and a greenish purulent fluid containing numerous streptococci was withdrawn under hypertension by lumbar puncture. Death took place within a week of the onset of the disease, and the autopsy showed purulent meningitis of the convexity of the anterior lobes. The optic chiasma and medulla were bathed in pus, which contained numerous streptococci. There was no otitis.

April the 25th, 1922.

Acute Osteomyelitis; Vaccine Treatment; Death.—MM. A. MARTIN and A. JOLY reported the case of a youth, aged 17 years, suffering from acute osteomyelitis of the lower end of the femur, who was treated for three weeks by an antistaphylococcal vaccine of the Institut Pasteur. On the twenty-first day, as there was no improvement in the local signs or general condition a free incision was made in the thigh and more than a litre of pus evacuated, as well as a large quantity of small sequestra. Death took place a few hours after the operation.

Addison's Disease in a Child.—MM. LEREBoullet and PEIGNAUX reported the case of a girl, aged 15 years, which was remarkable for its rapid course. The disease began five weeks before death with asthenia and progressive melanoderma. Examination of the blood showed a marked hypoglycæmia (0.63). Suprarenal opotherapy had no effect. The failure

of treatment was explained by the condition of the suprarenals, which were found at the autopsy to be filled with caseous tubercles. The pulmonary lesions were very slight, consisting only of small tubercles at each apex, a calcified tubercle at the right base and a calcified gland at the right hilum.

Congenital and Familial Nystagmus with Albinism.—MM. P. H. PAPILLON and C. LESTOQUOY showed a boy, aged 5 years, with this condition. Apart from complete discoloration of the choroid and horizontal nystagmus the eyes were normal. The parents and the only other child showed nothing abnormal, but the association of albinism and nystagmus had been present in every other generation for five generations.

X-Ray Diagnosis of Enlargement of the Thymus.—M. G. BLECHMANN showed an infant, aged 5 months, who was under treatment for loss of weight and probable congenital syphilis. X-ray examination, which was performed on account of a slight systolic murmur, revealed a considerable enlargement of the thymus, although there had never been any signs of compression.

Severe Heredo-syphilitic Osteo-Arthritis of the Hip occurring during Treatment for Congenital Dislocation of the Hip.—M. LANCE recorded this case in a girl, aged 7 years. Rapid improvement took place under specific treatment, but the girl was lost sight of before a complete cure was obtained.

Influence of Large Doses of Anti-Pneumococcal Serum on the Weight Curve of Infants with Pulmonary or Digestive Disorders.—MM. RIBADEAU-DUMAS and J. MEYER reported fourteen cases illustrating the general improvement following the injection of large doses (40–50 c.c. daily) of antipneumococcal serum.

Eventration of the Right Half of the Diaphragm in an Infant.—MM. P. H. PAPILLON and E. PICHON reported a fatal case of this condition in a female infant, aged 9 months, in whom the diagnosis was made by pneumo-peritoneum. Death was due to tuberculous broncho-pneumonia. At the autopsy the right cupola of the diaphragm was found to reach up to a level corresponding to the third rib. The right lung was very small but had three lobes. The left half of the diaphragm was normal. The interesting features in the case were (1) the sex, (2) the localisation on the right side, (3) the diagnosis from hernia. According to Louste and Fatou, who collected 105 cases of eventration of the diaphragm, the condition was four times as common in males as in females, and only six cases have hitherto been recorded on the right side as compared with 99 on the left.

May the 16th, 1922.

The Pathogenesis and Treatment of Tetany.—M. P. ROHMER reported that by administration of sodium phosphate in daily doses ranging from 0.30 to 1.50 gm. per kilo of the child's weight, he was able to produce more or less severe symptoms of tetany, such as generalised convulsions, spasm of the glottis and carpopedal spasms in children in whom the disease was latent, whereas in healthy children this effect was rarely observed.

Sodium phosphate, therefore, acted as a provocative agent in cases of latent tetany. On the other hand, a cure was effected by increasing the calcium content of the blood by administration of large doses of calcium salts. The most rapid and certain effect was produced by calcium chloride, which never failed in any cases in which it was used. It should therefore be the treatment of choice in infantile tetany. In less severe cases, especially in latent tetany, or when calcium treatment had to be continued for a long time, it could be replaced by calcium lactate.

Congenital Diaphragmatic Hernia with a Hereditary History of Hernia.—M. G. SCHREIBER reported the case of a female infant, who as soon as it was born uttered a single cry, immediately became very cyanosed and could not be resuscitated. A diagnosis of congenital diaphragmatic hernia was made based on the single cry, the cyanosis, which could not be explained by any other cause, and especially by the heart beating on the right side. Radioscopy confirmed the diagnosis, and the autopsy showed dextrocardia and the presence of the stomach, small intestine, spleen and left lobe of the liver in the thoracic cavity. The mother presented an eventration, and three of the other four children were affected with hernia—two had a right inguinal hernia and one an umbilical hernia. The father had a double inguinal hernia, and two of his sisters had been operated on for hernia, which was bilateral in one and unilateral in the other. The mother had had well-marked varicose veins during each of her pregnancies, and stated that her father, mother, four sisters and three of her brothers also suffered from varicose veins. Her three youngest brothers, of whom the oldest was 14, were not affected.

Treatment of Nocturnal Incontinence by Acidification of the Urine.—M. ZUBER stated that during the last five years he had successfully treated numerous children suffering from nocturnal incontinence of urine by administration of Joulie's solution of phosphoric acid, which had the following composition: acid. phosphor. 17 grm., sod. phosph. 34 grm., aq. dest. 250 grm. In three-quarters of his cases of incontinence he had found that the urine was alkaline, neutral, or only faintly acid. In such cases he gave the solution in doses of 1-4 teaspoonfuls before each meal for some weeks. In every case in which the urine could be made partly acid a cure was effected, but in cases in which the urine was originally acid the treatment failed.

A Mild Case of Thomsen's Disease.—M. R. VOISIN showed a girl, aged 13 years, who was the sixth member of the family affected without the real nature of the disease having been recognised. The difficulty in initiating a movement was most marked in the summer and when the child was tired. Her paternal grandmother, father, two paternal aunts and one paternal uncle had been similarly affected. In both the father and the child the motor disturbance was difficult to detect, but was distinctly felt by the patients, and both showed a characteristic myotonic reaction.

Intravenous Injection of Salicylate of Soda in Children.—M. LESNÉ stated that in cases of gastric intolerance salicylate of soda might be given intravenously or *per rectum*. Intravenous injections should be reserved for cases of gastric intolerance, or for the severe hyperthermic forms of acute rheumatism or those complicated by endo-pericarditis. M. Lesné used a

freshly prepared solution of 50 per cent. in distilled water in doses of 0.25 grm. for each year of the child. A dose of 3-4 grm. was injected twice daily to the exclusion of any other treatment or at the same time as a smaller or equal dose given by mouth. The injections were not painful, provided they were strictly intravenous, and might be continued for several days without causing induration of the wall of the vein. M. Lesné had employed the treatment in numerous cases of gastric intolerance both in the adult and child without any ill-effect.

Cervical Rib and Scoliosis.—M. ROEDERER showed a girl, aged 13 years, who presented well-marked scoliosis associated with a bilateral cervical rib corresponding to the sixth cervical vertebra. There were no signs of compression.

Familial Scaphoiditis.—M. ROEDERER, who had previously shown a girl with inflammation of the tarsal scaphoid, exhibited the X-ray plates of the patient's brother, aged 2 years, who, as the result of an injury, developed scaphoiditis in both feet. Complete recovery followed immobilisation for two months.

Herpes Zoster and Varicella.—M. G. L. HALLEZ recorded the case of a boy, aged 10 years, who developed typical varicella 13 days after the appearance of herpes zoster of the inferior maxillary branch of the left trigeminal nerve in his mother, a woman aged 43.

Abstracts from Current Literature.

Genito-Urinary Diseases.

Imperforate hymen (*Med. Journ. Austral.*, 1921, II, p. 402).—J. ALLAN. —A girl, aged 13 years, complained of severe pain on defæcation and urination, and on palpation a rounded swelling was detected above the pubis. The hymen was found to be imperforate, and on incision 740 c.cm. of fluid was removed, with complete relief of all the symptoms.

F. R. B. ATKINSON.

Tumour of the vagina in a child aged one year (*Glasg. Med. Journ.*, 1922, II, p. 210).—R. A. Lennie reported this case at a meeting of the Royal Medico-Chirurgical Society of Glasgow. Tough in consistence, the tumour was found to be attached by a comparatively broad base, partly to the anterior vaginal wall, and partly to the urethra on the right side. It was easily excised. Microscopic examination demonstrated that it had the characters of a very vascular fibroma, or of a nævus associated with a considerable amount of fibromatous growth.

J. ALLAN.

Perithelioma of the penis (*Il Policlinico, Sez. Chir.*, 1922, XXIX, p. 23).—L. Gobbi records a case in an infant, aged 10 months. The organ was considerably enlarged and in an erect state, the enlargement being due to affection of the corpora cavernosa, the corpus spongiosum not being affected. In the left inguinal region there were two infiltrated glands in a

condition of acute inflammation. Death took place ninety days after the first appearance of the lesion without any appreciable disturbance of micturition. Histological examination showed newly-formed cells arranged in characteristic manner about the vessels, collagenous fibres between the cells, and a perfectly normal appearance of the endothelium of the vessels.

J. D. ROLLESTON.

The ulcerated meatus in the circumcised child (*Amer. Journ. Dis. Child.*, 1921, xxi, p. 38).—**J. Brennemann** has for many years observed a peculiar lesion of the urinary meatus in circumcised male children which is characterised by ulceration, crusting, narrowing of the urinary passage, and nearly always accompanied by painful urination, often with distended bladder and occasionally by hæmorrhages. The condition is almost unknown in the nursing baby, is relatively rare in the first six months, and is exceptional before the third or fourth month. It is much commoner in the latter half of the first year, is probably most frequent and severe during the second year, becomes less common in the third year and vanishes soon after this. Brennemann attributes the ulceration to the ammoniacal diaper described in 1915 by Zahorsky—the only other writer whom he has found to mention the condition. The ætiology of the ammoniacal diaper, though obscure, seems due to one or both of two factors—a dietetic error which increases the ammonium or urea content of the urine, and the presence of an alkali or of certain bacteria in the diaper. Treatment consists in correcting, if possible, the dietetic errors, and thoroughly rinsing and boiling the diapers, night-clothes and bedding. Commenting on this paper, **J. v. Bokay** (*Jahrb. f. Kinderheilk.*, 1922, xcix, p. 303) remarks that this condition was described by J. Bokay, sen., in 1878 under the name of *ulcus orificii externi urethræ* in circumcised Jewish children, aged from 0–14 years. v. Bokay himself in the course of the last 37 years has seen 166 cases, 38 of which occurred in the first year, 94 between 1 and 3, 25 between 3 and 7, and 9 between 7 and 14. All the cases were in circumcised Jewish boys, with the exception of a Christian boy, aged 13 years, who suffered from nocturnal enuresis and had a spontaneously retracted foreskin. The mechanical irritation of masturbation may also have contributed to the formation of an ulcer in his case.

J. D. ROLLESTON.

Hyperorchidism (*Deutsch. Ztschr. f. Chir.*, 1922, clxviii, p. 1).—**A. Haas**, who records a case in a boy, aged 9 years, states that only six cases of supernumerary testes confirmed by autopsy have hitherto been recorded. With the exception of Le Dentu's and Lossen's patients the supernumerary testis was always on the left side. In Haas's case on the left side of the scrotum there was a hypoplastic third testis, which in contrast with the better-developed and likewise undescended other left testis was not in a congenital hernial sac. The supernumerary testis had an epididymis as well as a vas deferens.

J. D. ROLLESTON.

Torsion of the hydatids of Morgagni (*Lancet*, 1922, i, p. 693).—**C. E. Shattock** reports a case in a boy, aged 14 years, who complained of acute pain in the right half of the scrotum and groin of five days' duration. At the age of 5 years an operation for inguinal hernia had been performed on the right side. On examination the right testicle was found imperfectly descended, and appeared to be situated in the region of the

external ring, where there was a tender, smooth swelling. The skin over this was normal in temperature. There was no evidence of a recurrence of the hernia. Temperature 100° F.; pulse 98. The case was diagnosed as one of torsion of an imperfectly descended testicle. At the operation there were found attached to the upper pole of the testis close to the globus major of the epididymis two pedunculated hydatids, lying close together—each about the size of a pea and blue-black in colour; the pedicle of each was twisted, and they were adherent to the parietal layer of the tunica vaginalis by recent lymph. The hydatids were removed, and the testicle was freed and fixed down in the scrotum by a stitch to the thigh. Recovery was uneventful.

J. ALLAN.

Stone in female bladder (*Dub. Journ. Med. Science*, 4th series, 1921, p. 118).—**F. Dunne** records a case in a girl, aged 15 years, who complained of pain in the bottom of the stomach. There was some frequency of micturition, and urine contained albumin and muco-pus. On passing a metal catheter a stone was struck. The urethra was dilated by forceps, Bozemann's catheter and the finger, and two stones were removed, weighing 176 and 296 gr. respectively. Recovery was uneventful and there was early control of the bladder.

J. ALLAN.

Malformation of the kidney in infancy (*Lancet*, 1922, i, p. 737).—**E. B. Smith** and **E. H. Shaw** report two fatal cases. In one case, that of an infant, aged 14 months, the post-mortem revealed a condition of bilateral hydronephrosis with marked dilatation and convolution of the ureters, which were duplicated on either side. The left ureter was enormously dilated and tortuous. In the other case (female infant, aged 7 weeks) both kidneys were slightly enlarged, exhibiting a moderate degree of hydronephrosis, the pelves and calices being widely dilated and the kidney tissue reduced in each instance to a narrow belt $\frac{1}{4}$ in. to $\frac{1}{3}$ in. in diameter.

J. ALLAN.

Bilateral hypoplastic cystic kidneys (*Am. Journ. Dis. Child.*, 1922, xxiv, p. 1).—**C. H. Greene** records a case in an American female child, aged $3\frac{1}{2}$ years, who was breast-fed for only a few months, cow's milk being used up to the eighth month, and thereafter condensed milk, rice and potatoes. Under the diet she developed a marked degree of rickets. At the age of $3\frac{1}{2}$ she weighed only 33·5 pounds, was unable to walk, and showed marked deformities of head, chest and extremities. There was no mental retardation. The skin was of uniform ivory-like pallor and there was a marked secondary anæmia. There was polyuria and polydipsia. The Wassermann and tuberculin tests were negative. The urine contained albumin, but no casts, and was of low specific gravity—1005–1012. The systolic blood-pressure varied from 100–108, the diastolic from 65–70. The spleen was markedly and the liver slightly enlarged. The kidneys were not felt. While in hospital she became stuporous, hyperpnœic, and lost 15·5 lbs. in weight. She was transfused with 175 c.c. of her father's citrated blood. She improved for a short time, the anæmia was less, and she gained 5 lbs. in weight. Subsequently vomiting and anuria developed and death supervened. Post mortem the spleen was large and weighed 100 gm., was deep red in colour and of firm consistence. The liver was also large and showed numerous small fatty areas. Both kidneys were atrophic, the left weighing

10 grm. and the right only 7 grm. The renal pelvis was large and the cortices much diminished. In the place of the latter and the distal portions of the medulla the tissue appeared as loose meshwork of irregularly dilated tubules. The ureters were dilated. The costochondral junctions from the third to the eighth rib were much enlarged. The bone-marrow was hyperplastic. Microscopically there was a marked amount of disease in the splenic fibrous tissue and a marked increase in endothelial casts. Throughout the splenic pulp there were numerous red blood-corpuscles and normoblasts were present. In the costo-chondral junctions the proliferative cartilage was most irregular and the calcification defective. The non-proteid nitrogen was 48 mgrm. per 100 c.c. of blood, showing definite nitrogenous retention. In the kidneys the striking feature was the great dilatation of the second portion of the convoluted tubules and the absence of interstitial tissue. There was general glomerular hypertrophy and Bowman's capsules were thickened. The dilations of the tubules were spherical or fusiform, and the lining was cuboidal or fusiform. There were no marked changes in the loops of Henle or in the distal convoluted tubules. The cysts were not retention cysts for the changes were those of form and not of structure. The small size of the kidneys was due to a failure of development rather than to degeneration or atrophy and there were no evidences of obstruction.

CHRISTOPHER ROLLESTON.

Double congenital hydronephrosis (*Edin. Med. Journ.*, 1921, I, p. 369).—**R. W. Johnston** and **F. J. Browne** report a case in a female infant born ten days before the expected date. There was no evidence of prematurity, except some rather unusual softness of the cranial bones. The infant died suddenly about six hours after birth. Pathological and microscopical findings are fully detailed. The following conclusions are arrived at: (1) There is present in the ureter a chronic inflammatory change involving chiefly the muscular coat, and giving rise to a new connective-tissue formation, which causes thickening of the wall, atrophy of the muscle, and stenosis of the lumen of the ureter on the right side, and on the left side complete obliteration. (2) The stenosis of the right ureter interferes with the free exit of fluid secreted by the kidney, with secondary dilatation of the kidney tubules into cysts. On the left side the complete obliteration of the ureter has resulted in cessation of secretion and partial atrophy and sclerosis of the kidney tissue. (3) The primary condition is not developmental, but probably a chronic inflammatory ureteritis occurring during foetal life.

J. ALLAN.

Bacillus coli infection of urinary tract in infants (*Glasg. Med. Journ.*, 1922, I, p. 82).—**J. Thomson** deals with the diagnosis and treatment of acute uncomplicated infection with *Bacillus coli* of the higher parts of the urinary tract as it occurs in children of two years old and under, based on the study of seventy-four cases. The origin of the infection is generally from the patient's own bowel, but there must be some predisposing condition present: either (1) the resistance of the tissues has been lowered by antecedent general or local disease; or (2) there has been some retardation of the flow of urine downwards so that the bacilli have been kept abnormally long in contact with the mucous membrane; or (3) something has taken place in the bowel which has increased the virulence of the micro-organisms themselves. The organisms may enter the urinary tract

by the blood-stream, directly through the tissues or by an ascending infection passing up the urethra from without. It is important to diagnose the part of the urinary tract affected. As to treatment, it is always important to see that the child is drinking plenty of fluid, and if the patient refuses to do so, water should be given through a stomach-tube or in enemata. It is also necessary that the bowels should be kept freely open. The rest of the treatment consists in one of three measures: (1) The use of sera or vaccines; (2) the administration of antiseptics; and (3) the alkalisation of the urine.

J. ALLAN.

Retention of urine in a premature infant (*'La Pediatria,'* 1921, xxix, p. 457).—**F. Laureati** describes the case of a boy born spontaneously at the eighth month, who for eight days after birth had passed no urine. A distended bladder was found and 300 c.c. clear urine drawn off by a fine catheter. Two days later a similar condition resulted in 250 c.c. being drawn off, but spontaneous micturition never occurred, and the infant's general condition deteriorated within a month. There was at no time any cedema, vomiting or convulsions. An autopsy could not be obtained, and the author considers the condition due to imperfect development of the micturition centres.

VINCENT DICKINSON.

Incontinence of urine in childhood (*'Practitioner,'* 1921, cvi, p. 293).—**C. E. Sundell**.—In children about the age of three or four years bed-wetting constitutes enuresis. Enuresis may be an unconscious micturition, and is chiefly during waking hours due to grave mental defect, *petit mal*, or abnormality of the bladder or urethra, or it may be the result of urgency of micturition, and the chief cause is nervous. In this condition the child is conscious of the desire to micturate, but cannot restrain the act. During sleep the condition may be due to irritating qualities of the urine, or sources of irritation, as phimosis or worms. Dulling of the cerebral perception is the great cause of enuresis, and if associated with backward mentality thyroid gland administration is of great value. The best line of treatment in all cases is (1) to deal with associated conditions; (2) to attend to the child's health, especially that of his nervous system; arsenic in small doses is the best way; (3) the hour at which bed-wetting occurs should be discovered and the child roused a quarter of an hour before such is due.

F. R. B. ATKINSON.

Clinical investigations on orthostatic albuminuria (*'Amer. Journ. Dis. Child.,'* 1921, xxii, p. 388).—**H. Saito** investigated forty-four Japanese children who showed a moderate or severe degree of orthostatic albuminuria with the following results: (1) Fourteen had nervous diseases, such as chorea, periodic vomiting, asthma and enuresis, and the others complained of various nervous disturbances, such as headache, weariness and palpitation. Lordosis of the lumbar spine was found in 25 per cent. (2) Tuberculosis and syphilis had no bearing on the condition. (3) The great majority of patients (70 per cent.) with orthostatic albuminuria are in a state of vagotonia. (4) Renal function as measured by the phenolsulphonaphthalein test is generally normal. (5) The blood-picture was characterised by pseudo-anæmia, eosinophilia, and occasionally leucocytosis. (6) The amount of the acetic acid body in the urine varied either absolutely or relatively even in the same individual. (7) The albumin quotient of the proteids in

the urine was equal to that of the serum and of the cerebrospinal fluid (8) The most reliable methods for provoking albuminuria were (i) to make the individual hold a rod for ten minutes, and (ii) to make him kneel down for ten minutes. (9) The direct cause of albuminuria may be lordosis of the lumbar spine. Albuminuria, however, does not occur merely with lordosis, and vaso-motor instability is probably also a factor.

J. D. ROLLESTON.

Studies of nephritis in children ('*Am. Journ. Dis. Child.*,' 1922, xxiv, p. 125).—**H. Schwarz** and **J. Kohn** describe four main varieties based on an experience of sixty cases of renal disease: (a) Cases which occurred in previously healthy and afebrile children, and were characterised by the appearance of rapidly occurring and persistent œdema. There was no hæmaturia, albumin was abundant, and there was occasional diminution in the amount of the urine passed. This is the nephrosis of Volhard, or nephritis parenchymatosa. (b) The case was acute with fever. Œdema was absent or of slight degree. The duration was usually short, but may become chronic. This is acute nephritis. (c) Cases of long duration accompanied by occasional acute stage, but with no hæmaturia, œdema, or high blood-pressure—the pædonephritis of Heubner. (d) Cases marked by pallor, headache, convulsions, high blood-pressure, polyuria and death. They are similar to the contracted kidneys of adults. Seventeen cases of nephrosis are described. Eleven of them had had no recent disease. In three there was a recent or remote history of scarlet fever, and one had recently had diphtheria. Exposure to cold, and sex, are not important, as eight began in winter and nine in summer, and eight were females and nine males. Clinically there were hydropericardium, and pleural effusion, especially on the left side, was present in all cases, with more or less general œdema. Œdema of the face is usually present, and œdema of the brain was believed to have existed in one child who had attacks of headache, cyanosis and semi-consciousness. Diarrhœa may be severe. The anæmia is usually of a mild secondary type, the red blood-corpuscles rarely falling below 3,000,000. The blood-pressure was practically normal and in only one case was there a persistently high blood-pressure. The serum of the blood is milky instead of straw-coloured. The nitrogenous constituents of the blood, including urea, creatinin, uric acid and non-protein nitrogen show little change. The serum protein of the blood was diminished in all but one, but this diminution does not run *pari passu* with the severity of the disease. The globulin is said to predominate over the albumin. There is a marked increase in the cholesterol and fat of the blood. The amount of cholesterol usually present in the blood varies from 0.12 to 0.22 per cent. In some cases, but not all, the amount of cholesterol varies with the amount of œdema. Œdema does not depend on the amount of blood protein in the serum or of sodium chloride, as these remain constant, while the œdema diminishes. The cholesterol content of the œdema fluid is practically *nil*. The administration of thyroid by increasing the basal metabolism removes œdema. In normal persons the greater part of the water taken in is excreted within four hours. The specific gravity of the urine gradually diminishes as the excretion increases, and there is very little evidence of water retention in cases of nephrosis. Nitrogen excretion is normal. The sodium chloride excretion is practically *nil*. Pneumococci infections are common and dangerous. Two of the seventeen died of pneumococcic peritonitis, and

two of pneumonia. Uræmia is rarely seen. As regards treatment neither the albumin nor the cholesterinæmia can be influenced. Almost the normal amount of water can be given to these patients without harm. Ordinary diuretics are of no use. Thyroid has in many cases a miraculous effect in removing œdema. The diet should be salt-free, but should contain a normal amount of fat and carbohydrate and more than normal amounts of protein. Decapsulation was tried in two cases and proved useless.

CHRISTOPHER ROLLESTON.

Acute diffuse nephritis in children (*'Brit. Med. Journ.,'* 1922, i, p. 642).—A. R. Sami reports a case in a girl, aged 9 years, who was sent to hospital as a case of acute appendicitis. There was abdominal pain and the child had vomited several times, but the pain was limited to the umbilical region and there was no distension or rigidity anywhere. Deep palpation elicited no tenderness in the right iliac region. The temperature was 103 F., pulse-rate 140, respirations 36, and the patient was in a state of apathy. Dyspnœa was very marked, but there was no sign of pulmonary disease and no cyanosis. Absence of dropsy was a feature of the case. It was stated that a week before admission to hospital the child ceased to micturate for thirty-six hours and then the legs became swollen. When urine was again passed the swelling in the legs suddenly disappeared, but the child began to be sick every time she took food, and the bowels were very loose. When a specimen of urine was obtained it was found to be dark in colour and acid in reaction, with a specific gravity of 1020. Albumin was present, but not in large quantity; no blood was detected; casts, chiefly hyaline and granular, were detected, also diacetic acid. Vomiting persisted for ten days, and diarrhœa, with mucus in stools. continued a few days longer. During convalescence herpes on the hands and feet developed. The child recovered, and the urine became normal and free from albumin.

J. ALLAN.

Chronic diffuse nephritis in childhood (*'Amer. Journ. Dis. Child.,'* 1922, xxiii, p. 183).—C. H. Greene, who records the case in a girl, aged 4 years, with a review of the literature, states that the occurrence of chronic diffuse nephritis in childhood was first suggested in 1872 when Gull and Sutton described a case of contracted kidneys in a girl, aged 9 years. The first complete case report was given by W. H. Barlow in 1874, since when a gradually increasing number of cases has been reported, especially in England, where the name "renal infantilism" has tended to emphasise the associated general bodily changes as well as the original kidney lesion (*vide* BRITISH JOURNAL OF CHILDREN'S DISEASES, 1912, ix, pp. 289, 337). Greene comes to the conclusion that chronic diffuse nephritis is probably of congenital origin, though no definite ætiology can be ascribed. It is characterised by evidences of functional renal insufficiency dating from early infancy. The patients show great developmental disturbances, with stunting and backwardness of growth, difficulty in feeding, anæmia and rachitis. The renal insufficiency is more directly shown by the excretion of a large volume of dilute urine of low specific gravity, which contains a slight amount of albumin and a small number of casts. The phenolsulphonephthalein excretion is low. Death usually results from uræmia. The morbid anatomy is similar to, if not identical with, that of chronic diffuse nephritis in adults.

J. D. ROLLESTON.

Nephritis in children (*'Amer. Journ. Dis. Child.,'* 1922, xxiii, p. 375).—**G. Boyd**, in a paper based on the study of 26 cases of nephritis at the Hospital for Sick Children, Toronto, states that the prognosis of nephritis in children must be based on a consideration of all available data. In her series 50 per cent. recovered without any evident impairment of renal function or general health, as judged by the condition of the children nearly one year after their illness. Relapses occur frequently in the severe cases and justify a bad prognosis. Tests of renal function are invaluable in determining the prognosis and line of treatment. The concentration test and the determination of the blood nitrogen constituents furnish the most reliable data. Administration of calcium salts, especially the lactate, are of value in clearing up the oedema. J. D. ROLLESTON.

The prognosis of nephritis in childhood (*'Journ. Amer. Med. Assoc.,'* 1921, lxxvi, p. 505).—**R. F. James** has examined 70 children who had had nephritis in the Boston Children's Hospital during the last 16 years. 67 were admitted with a diagnosis of acute nephritis and 3 with chronic nephritis; 9 of the 67 cases, or 13·3 per cent., terminated in the chronic type, and of these only 2 were severe. The average age on admission to hospital was $6\frac{1}{2}$ years, the oldest being 12 and the youngest 2. At the time of examination the average age was 10, the oldest patient being 19 and the youngest 4. All the 67 patients who had had acute nephritis were living under ordinary conditions on ordinary diet, and in every case the urine was found to be negative. As regards the 9 chronic cases the average length of time seen after discharge was $2\frac{1}{2}$ years; 4 were seen 5 years and 2 between 1 and 2 years after discharge. In none of the 7 cases examined was the blood-pressure raised. Of 12 patients examined 8 had albuminuria, and 4 had none at all. James concludes that the majority of cases of acute nephritis recover absolutely, but that there is no justification for saying that a child is well from one or several negative urinary findings until after the child has lived in an ordinary environment and on a regular diet for a considerable period. As regards chronic nephritis, he considers that there is no specific guide for prognosis. Many patients with mild chronic nephritis recover. Many will stand severe infections without acute exacerbations of nephritis, but these are more prone to follow respiratory infections. All foci of infection should therefore be treated, such as diseased tonsils, carious teeth and otitis media. J. D. ROLLESTON.

The effect of pituitary extract on diuresis (*'La Pediatria,'* 1922, xxx, p. 819).—**M. Misasi** made a study of this subject on 30 children, injecting $\frac{1}{4}$ to 1 c.c. according to age every morning after the bladder had been emptied. In 20 normal cases after about 3 hours there was a urinary concentration from 1018 to 1022. The quantity of urine passed after the injection was about 30 c.c. in the first 3 hours, increasing progressively to the tenth hour, when the urine in quantity and specific gravity became similar to that passed before the experiment. An interesting fact noticed was that concentration occurred more rapidly according to age. In infants $\frac{1}{4}$ c.c. was enough to produce in $1\frac{1}{2}$ hours an increase of specific gravity and diminution of quantity, and after 6 hours a return to normal. In no case was any intolerance observed. The chlorides increased in direct relation to the specific gravity; in nephritic subjects the concentration was later and more prolonged and return to normal was slow, while the chlorides diminished.

VINCENT DICKINSON.

The horse-serum treatment of pyelitis and pyuria (*Amer. Journ. Dis. Child.*, 1922, xxiv, p. 179).—**D. M. Cowie** records nine cases of pyuria in children aged from 9 months to 17 years, treated by injection of horse-serum in doses ranging from 3 to 10 c.c. He attributes the beneficial results obtained to the non-specific action of the protein itself, which mobilises the normal antibodies of the circulating fluids to the affected part.

J. D. ROLLESTON.

Decapsulation of the kidney for chronic nephritis (*Edin. Med. Journ.*, 1921, i, p. 111).—**J. S. Fowler** records two cases in children, aged 7 and 10 years respectively, in which markedly beneficial results followed this operation. Chronic parenchymatous nephritis with oedema as the main symptom is the form of Bright's disease in which decapsulation gives the best results. The operation is not in itself dangerous to life, and patients stand it much better than might *à priori* be expected. Decapsulation of one kidney appears to give sufficient relief to the symptoms and would therefore seem preferable to a double operation at one sitting. The operation ought to be considered in all bad cases if reasonably prolonged medical treatment is producing no betterment. This applies especially to children, because in them there is a much greater probability of ultimate recovery from chronic nephritis than in later life, and thus operation is more than justified as a means of tiding the patient over a critical period. **J. W. Simpson** (*ibid.*, p. 115) reports four cases to illustrate the beneficial results of this operation in the chronic nephritis of childhood. **J. Fraser** (*ibid.*, p. 117) discusses the subject from the surgeon's point of view and gives clinical histories of four cases in children. He states that the results of catheterisation of the ureters show that after operation the kidney which has been stripped functions better than the other. It is advisable in all cases to operate on both kidneys, because while stripping one kidney often relieves all the symptoms for a time, the albuminuria continues, whereas the double operation offers a prospect of a cure. There is no advantage, but rather the reverse, in decapsulating both kidneys at the same time. The second operation should be postponed until the first has been recovered from.

J. ALLAN.

Dermatology.

Congenital bromoderma (*Jahrb. f. Kinderheilk.*, 1922, xcvi, p. 59).—**J. Langer** describes the first case on record of this condition. The patient was a male infant who was admitted to Langer's wards at the age of 8 days with the diagnosis of furunculosis and loss of weight. The hair was matted together in several places on the scalp on which infiltrations varying in size from a lentil to a pea could be felt. The left cheek, outer surface of the scrotum and outer side of the right thigh showed two red papules with small white points on their surface. The diagnosis of a bromide eruption was made and confirmed by the following history: The mother, a primipara, aged 25 years, had suffered from epilepsy for years, and had repeatedly been ordered bromides. During pregnancy she had first been taking 2 grm. of bromide daily for six weeks, and later 3 grm. of sodium bromide daily for six days. Under treatment with dermatol the eruption completely disappeared in a fortnight, but death took place from broncho-pneumonia at six weeks. The urine gave a positive reaction for bromide until death.

J. D. ROLLESTON.

A case of sclerema neonatorum ('*Lancet*,' 1922, i, p. 368).—**E. Bourne**, who records a case, states that this disease is very fatal, and attacks children living under unhealthy conditions. The skin becomes waxy, leathery, rigid and adherent to underlying structures. The infant is unable to suck, the temperature falls, the pulse fails, and the child dies in two to ten days. The corium and rete mucosum are thinned, fat atrophies, and the vessels contract. The patient, a male, was born to a healthy but unmarried mother aged 20 years, and weighed 5 lb. 5½ oz. at birth. He was unable to take the breast and after the third day began to vomit. On the fifth day meconium was still being passed and a swelling was noted on the legs and thighs, which became of cartilaginous hardness next day and spread to the buttocks, back, neck and face. The skin was sometimes cyanosed and sometimes earthy in colour and of a waxy appearance. The facial expression was pinched, rigid and corpse-like. The temperature was subnormal and the pulse palpable. The child was placed in an incubator, treated with $\frac{1}{16}$ gr. of thyroid extract, $\frac{1}{8}$ gr. of grey powder, and 1 gr. of sodium bicarbonate every four hours. The bowel was irrigated with sodium bicarbonate solution. Improvement was rapid, and vomiting soon ceased, and he was able to take the breast every two hours, and $\frac{1}{2}$ oz. of cod-liver oil emulsion *t.d.s.* He was discharged on the twenty-second day. He was weaned on his mother's account and continued to do well. At six months old the skin was normal, and at nine months he was a perfectly healthy infant. Thyroid was given on the supposition that these symptoms were due to acute functional failure of that gland. Rectal irrigations were administered to counteract the toxæmia of the intestinal stasis, manifested by the passage of meconium as late as the fifth day after birth.

CHRISTOPHER ROLLESTON.

Mongolian blue spots at São Paulo ('*Arch. de méd. des enf.*,' 1922, xxv, p. 23).—**C. Ferreira**.—During 1920 485 infants attended the infants' dispensary at São Paulo; 440 were whites, 38 mulattoes and 7 negroes, Mongolian spots were present in 22 or 5 per cent. of the whites, in 24 or 63 per cent. of the mulattoes, and in 3 or 43 per cent. of the negroes. The most frequent sites for the spots were the sacral region (15 cases), buttocks (14 cases), and intergluteal fold (14 cases). The ages of the infants ranged from 1 to 7 months; 30 had only 1 spot, 11 had 2 spots, 3 had 6, one had 5 and one had 11. The percentage of Mongolian spots in white infants was higher than in past years. Since 1915, on the other hand, the percentage in mulattoes was lower than that in 1919 (*vide* BRITISH JOURNAL OF CHILDREN'S DISEASES, 1921, xviii, p. 163).

J. D. ROLLESTON.

Mongolian blue spots at Bordeaux ('*Journ. de méd. de Bordeaux*,' 1922, xciv, p. 355).—**Boisserie-Lacroix** has recently seen 7 cases at the Children's Hospital at Bordeaux among about 1000 children under 18 months of age. This proportion is much higher than that observed in other European cities, and is to be explained by the large number of foreign immigrants at Bordeaux. The rarity of these spots in European children is in marked contrast with its almost constant presence in yellow races (98 per cent.) and its frequency in mulattoes (50-70 per cent.) The only exception to the rule in Europe is to be found in the children of Sardinia, in whom Cozzolino states that the spots are present in 14 per cent. The favourite site is the sacral or gluteal region, but they may

exceptionally be found on other sites such as the pinna or the nose. They are only found in dark children with a black iris. The number, size and intensity of colour vary. As a rule the spots are of a slatey blue, but sometimes they tend to be black or green. They first appear at birth or in the first weeks of life and gradually fade with advance in years, being rarely found after three or four years of age. They must be distinguished from bruises and nævi. Histological examination shows an entirely normal epidermis and a cutis vera loaded with large, irregular fusiform cells filled with pigmented granules.

J. D. ROLLESTON.

Congenital and hereditary onychogryphosis (*'Bratislav. Lekar. Listy,'* 1922, II, p. 146).—M. Mirula describes a family in which congenital onychogryphosis was present in three generations. The mother, her son and daughter, and their two sons, aged 3 months and 2 years respectively, presented malformation of the nails in both hands and feet.

J. D. ROLLESTON.

Skin diseases of infancy and childhood (*'Practitioner,'* 1922, cix, p. 67).—A. M. H. Gray.—Miliaria rubra consists of pin-head-sized red spots surmounted by a vesicle. It occurs on the covered parts of overclad infants, and is cured by appropriate clothing and calamine lotion. Napkin eruptions may consist of a diffuse redness of the genitals and inner aspect of the thighs, and may spread to other areas, or of discrete papules on the prominent parts of the buttocks, distinguished from syphilitic manifestations by the selections of prominences rather than folds. Dusting powders should be used, and in more acute cases calamine lotion. Pemphigus neonatorum is due to streptococcal infection of the skin shortly after birth. It usually occurs in infants of two to three days old, and consists of thin-walled blisters on healthy skin. The eruption spreads from the original focus with great rapidity. It must be diagnosed from the bullous syphilide. The latter is symmetrical and infects the buttocks, palms and soles. Early cases clear up well with dressings of 1 in 1000 acriflavine. In more severe cases 5 grains of ammoniated mercury should be incorporated in an ounce of calamine linament and the dressing changed three times a day. Infantile eczema occurs as commonly in breast- as in bottle-fed infants. Fat and flourishing children are those most affected. Its incidence is lower in the winter. It starts either on the cheeks or forehead, or on the scalp. It may spread down to the shoulder and a general exfoliative dermatitis may follow. The food should be reduced in fat children and calamine liniment or lotion applied. Lassar's paste containing 5 to 10 per cent. of coal-tar may be added. Urticaria is commonest in the summer and is very uncommon in breast-fed infants. It is probably not due to protein sensitiveness, but may be caused by excess of sugar. The treatment consists in diminishing the amount of sugar, and if this fails, meat, bananas and eggs should be discontinued and the brand of milk changed. A drachm of liq. picis carbonis should be added to the bath, and lead lotion is useful for diminishing local irritation. For troublesome cases of impetigo Lassar's paste is added, and for the bullous type acriflavine 1 in 1000 is very effective. The scaly circumscribed patches of chronic eczema are often associated with adenoids or with nasal and aural discharges, and these conditions must be appropriately treated. Chronic weeping patches are best treated by 2 per cent. silver nitrate. Microsporon ringworm is characterised by circular

patches on the scalp, while endothrix ringworm presents a diffuse or patchy scurfiness with no definite patches and with but few stumps. The endo-ectothrix variety tends to produce suppuration, and numerous pustular points surmount the infected hairs. Ringworm of the nails is best treated by surgical removal. Scabies in infants affects the soles, palms, and occasionally the face. A daily inunction of half a drachm of balsam of Peru and sulphur ointment usually effects a cure.

CHRISTOPHER ROLLESTON.

Eczema and fat excess in the milk (*Bull. Soc. de Péd. de Paris*, 1922, xx, p. 290).—**A. B. Marfan and Turquety** relate the case of a wet-nurse who, during a stay of 20 months at the Hospice des Enfants-assistés, suckled a dozen infants. Her milk was always abundant, and showed on analysis a large excess of butter (41 to 78 grm. per litre) from the tenth to the seventeenth month of lactation. Three infants she nursed during this period suffered from severe and extensive eczema, which disappeared in from 15 to 20 days after the nursing was left off and cow's milk with cream substituted. After the amount of butter in the woman's milk had become normal by restriction of fat and meat another infant suckled for more than 1½ months did not develop any eczema. Marfan observed that excess of butter in the milk was not observed in all cases of eczema in nurslings, and that milk containing it in quantities of 75–81 grm. was often easily tolerated. The case showed the action of toxic human milk in the pathogenesis of certain eczematous eruptions in the nursling, the toxic principle in which might be an albuminoid substance difficult to demonstrate, and all the more active when acting upon a very young infant with an intestine which was still very permeable.

VINCENT DICKINSON.

Cutaneous sensitisation tests in eczema and papular urticaria (*Amer. Journ. Dis. Child.*, 1922, xxiii, p. 316).—**D. M. Sidlick and T. C. Knowles** state that though Pirquet was the first to suggest a method for determining cutaneous sensitisation to proteins, it remained for Schloss to make clinical application of the procedure in children (*see BRITISH JOURNAL OF CHILDREN'S DISEASES*, 1913, x, p. 228). Sidlick and Knowles tested 23 infants and children with eczema and 12 with papular urticaria by protein sensitisation tests, which they found of great value in ascertaining the ætiological factor. Fifteen or 65 per cent. of the eczema cases had one or more positive reactions; 6 of the 15 were clinically cured, 3 showed marked improvement, and 6 were improved; 9 or 75 per cent. of the papular urticaria cases reacted to one or more proteins; 3 of the 9 were cured, 4 were markedly improved and 2 failed to improve. To be of value the food test must be + + or greater. It may be assumed that by correcting gastro-intestinal abnormalities an increase in the number of clinical cures is certain of attainment.

J. D. ROLLESTON.

Impetigo contagiosa as seen in schools (*Lancet*, 1922, i, p. 738).—**A. I. Simey** advocates that the disease be tackled in schools by a careful common-sense but strict attention to toilet, especially of the hair and scalp, and fingers, and by immediate and compulsory notification of every suspicious spot to the medical officer. The disease is especially liable to be spread during football terms. Schoolboys should be made to wear their hair short and have their scalps regularly washed or shampooed; they should be taught to begin the morning toilet by brushing the hair

thoroughly, and after that never to omit vigorous washing of the face especially around the ears, with soap and hot water. Special attention should also be paid to the finger-nails, which should be kept cut short and scrupulously clean. For local treatment removal of the scabs and application of dilute nitrate and mercury ointment is usually successful. Early application of iodine (2 per cent. in spt. vin. rect.) often aborts the development of a spot. Some lesions are best kept undisturbed and dry throughout, while in many cases a most efficacious remedy is the application of weak lysol or boric fomentations, keeping the part well covered. Constitutional measures must not be neglected, including regular exercise; the diet should include a liberal supply of fresh milk, butter, green vegetables and ripe uncooked fruit. Of medicines, cod-liver oil and iron, extract of malt, and aperients containing sulphur are the most efficacious, whilst a short stay at a bracing seaside resort will often turn the scale in favour of recovery, even in obstinate cases. Vaccine treatment is sometimes most efficacious, especially a mixed vaccine containing streptococcus and mixed staphylococcus strains. Intramuscular injections of colloidal manganese are sometimes effective.

J. ALLAN.

Impetigo nephritis ('*Klin. Wochenschr.*, 1922, I, p. 1826).—**J. Husler** alludes to Kaumheimer's paper (see *BRITISH JOURNAL OF CHILDREN'S DISEASES*, 1911, viii, p. 428), and states that no doubts can be entertained as to the existence of a nephritis due to impetigo. He regards it as a mistake to attribute this form of nephritis to diphtheria or to a mixed infection with diphtheria as has been done by Sieben, but maintains that impetigo nephritis is a well-marked disease of childhood, especially of the first ten years of life, being less frequent in older children and in infants. Its recognition is of therapeutic importance, as the condition requires a careful treatment of the skin lesions. It is therefore advisable to examine the urine in every case of impetigo.

J. D. ROLLESTON.

Ammonia dermatitis in infants ('*Amer. Journ. Dis. Child.*, 1921, xxii, p. 481).—**J. V. Cooke** states that the characteristic lesions of the diaper region in infants have long been recognised and described under a variety of names. Their differentiation from syphilitic lesions was first clearly made in 1905 by Jacquet, who divided them into simple, erythematous, erythematovesicular, erosive, papular or post-erosive and ulcerative forms, all of which are stages in one process, and may co-exist in the same patient. The features which distinguish these eruptions from those of congenital syphilis were shown by Adamson (*BRITISH JOURNAL OF CHILDREN'S DISEASES*, 1908, v, p. 13) to be as follows: (1) Limitation of the eruption to the convex surfaces of the diaper region and the absence of lesions on the face, palms and soles, and at the anal margin; (2) absence of the coppery colour of syphilitic eruptions, and other signs of syphilis, such as snuffles, rhagades and glandular enlargement; and (3) variations in the course of the erythematous lesions, which frequently tend to disappear without antisyphilitic treatment. Bacteriological examinations made by Cooke in infants with ammoniacal diapers showed that a urea-splitting organism could be isolated from the stools in a number of cases, and that the formation of ammonia could always be prevented by the use of an antiseptic such as mercuric chloride, which caused a prompt disappearance of the ammoniacal odour and a rapid regression of the skin lesions.

J. D. ROLLESTON.

Herpes and varicella (*Glasg. Med. Journ.*, 1922, I, p. 274).—**W. M. Elliott** submits a tabular statement of nine cases of herpes zoster, which occurred in the wards of the Ruchill Fever Hospital, Glasgow. Outbreaks of chickenpox followed after five of them, all within the acknowledged incubation period of the disease, and in none was any source of infection discoverable.

J. ALLAN.

Dermatitis herpetiformis in children (*Journ. Amer. Med. Assoc.*, 1922, LXXVIII, p. 945).—**E. A. Oliver** and **C. J. Eldridge**, who report two cases in a male infant, aged 18 months, and a girl, aged 10 years, state that dermatitis herpetiformis is a disease of adult life and is rarely found in children. In some cases nothing is found to account for the intense cutaneous reaction, in others the general health is impaired. In adults the disease is a nervous one, and frequently appears after nervous strain and shock, and its connection with the nervous system is well shown in cases due to pregnancy. According to Knowles, who collected 57 cases in children from the literature in 1907, the disease in children shows the following four differences from the adult type: (1) Itching is not so marked; (2) multiformity of the eruption is absent; (3) grouping is rare; (4) pigmentation is present in less than a quarter of the cases. Both the present cases, however, showed marked itching and distinct grouping. The multiformity was not marked, and pigmentation, though present, was not very pronounced.

J. D. ROLLESTON.

Calcification of the skin in a child (*Amer. Journ. Dis. Child.*, 1921, XXII, p. 412).—**J. L. Morse** records the case of a girl, aged $3\frac{1}{2}$ years, who presented large areas of induration in the upper and inner sides of the thighs, in the buttocks, and in small areas in the popliteal spaces and in the calves of both legs. In some places there were numerous small, hard nodules scattered through the indurated areas. The indurated areas had been first noticed by the father about a year before. The urine was normal. The stools showed no evidence of indigestion. The Wassermann reaction and tuberculin tests were negative. On examination of a small piece of tissue removed from the thigh, the microscopical appearances resembled in many ways the fat necroses found in the abdominal cavity in acute pancreatitis.

J. D. ROLLESTON.

Idiopathic hæmorrhagic sarcoma of Kaposi (*Amer. Journ. Dis. Child.*, 1921, XXI, p. 437).—**S. McLean**, who records a fatal case in a Jewish boy, aged $5\frac{1}{2}$ years, states that up to 1903, of 75 cases collected by Brayton all but 6 were in males. Since then many cases have been reported, the majority of which were in Jews. All the cases described by Kaposi in his original paper in 1872 were in persons over forty and were all fatal, although in some cases the disease lasted a number of years. In the present case the disease, which lasted about 8 months, was characterised by a symmetrical purplish indurated swelling of both cheeks, discoloured areas of infiltration on the face, ears and forehead, and subconjunctival hæmorrhages. Bluish spots resembling the eruption of cerebrospinal fever were scattered over the chest and limbs. Death took place from bronchopneumonia. There was no autopsy.

J. D. ROLLESTON.

Trichotillomania due to thread-worms (*Brit. Med. Journ.*, 1922, I, p. 641).—**H. C. Semon** reports a case in a boy, aged 6 years, who was first

noticed to pull out his hair when 3 years old. The scalp was denuded of hair mainly in the left frontal area, and epilation was mostly with the right hand, and at times quite subconscious. The habit was not practised during sleep and there was nothing to suggest that local pruritus in any way disturbed him. The scalp itself appeared to be somewhat deficient in sebaceous secretion but was not otherwise abnormal or irritated, and hairs epilated showed no evidence of dystrophy or other nutritional disturbance. The mental condition was good. Drugs prescribed to "quieten the nerves," and punishment or threat directed against the continuance of the practice had all proved unavailing. The presence of thread-worms was discovered and appropriate treatment instituted. The "hair-pulling" ceased.

J. ALLAN.

Correspondence.

To the Editor of THE BRITISH JOURNAL OF CHILDREN'S DISEASES.

DEAR SIR,—In forwarding you the enclosed copy of Dr. Nansen's Appeal, I should be glad if you could assist us in getting publicity for it in obtaining signatures and in collecting contributions in money or in kind for the purposes of medical relief. My committee was formed prior to the issue of the enclosed Appeal by Dr. Nansen, and, by arrangement with Dr. Nansen's committee, has taken over the functions of medical relief committee for this country.

Dr. Nansen's Appeal is, as you will see, directed primarily to medical and allied organisations and to men and women belonging to the professions they represent. But it is also our intention to issue an appeal to the general public, in which I hope we may also have your co-operation.

Yours faithfully,

68, LINCOLN'S INN FIELDS,
LONDON, W.C. 2;

L. HADEN GUEST.

December the 12th, 1922.

APPEAL FOR MEDICAL AID FOR RUSSIA FROM DR. NANSEN'S COMMITTEE.

To the Scientists and Medical Men of the World.

Following on the Great War, the civil war and the long blockade Russia has passed through a famine the like of which has not been known for centuries. One third of the vast area of Russia is affected by the famine, a population of thirty-five million is stricken and death has carried away millions of victims. Famine has wiped out both rural and urban populations. The peasants—the producers of grain for the world market—have died. Whole nations inhabiting the stricken regions have vanished, and children, the hope of the future, have died out elsewhere. The horrors of famine have driven the inhabitants to fly, leaving their homes, deserting their cattle and fields. Whole villages have been ruined, the households left without furniture and without cattle. Factories are idle; the number of unemployed is growing; thousands of children have been left homeless.

Russian medical *personnel*, being cut off from the rest of the world in remote villages and townlets, amidst thousands of sick and starving people, has been quite helpless in this great calamity; yet they have heroically borne their burden and carried out their duty despite the imminent danger of death. Infirmaries, and in particular Emergency Medical Treatment Centres, organised with great effort, have had to be closed down owing to the lack of drugs and medical stores; and thus the struggle with the effects of famine is left entirely to the Russian medical *personnel* themselves. The exhausted and weak population of the affected regions fall easy victims to all kinds of epidemics, which threaten not only Russia but the whole of Europe.

The lives not only of the present generation but of those of the future are in danger.

The necessity of immediate and energetic aid is imperative. But Russia by herself is powerless.

We therefore appeal in the name of humanity and international solidarity to the Scientific World of Europe and America, and we are sure that our appeal will meet with a generous response from the scientific and medical men of the world.

The sanitary and biological effects of the famine will be felt for a long time to come, and not only in Russia but in Europe as well. The Russian famine confronts the Scientific World as an exceptional sanitary and biological problem for the solution of which all the forces of science and medicine need to be concentrated.

And how should this assistance be given?

In every country, in each division of the country, and in all the larger centres, a Committee of Medical Relief to fight the effects of the famine in Russia should now be organised.

All the medical committees should be united in an International Committee for medical aid to fight the effects of the famine in Russia, under the presidency of Dr. Nansen.

The programme of the work of the international fight against the consequences of the famine must comprise: (1) A well-directed agitation for the recognition of the Russian famine as an international sanitary and biological calamity. (2) Appeals to governments. (3) To the people of the different countries. (4) Appeals to the scientific and medical workers of the whole world. (5) The collection of money. (6) The organisation of help in the way of medical equipment, medicines and sanitary articles, and means for organising medical institutions in the affected areas, as well as (7) The scientific study of famine from the sanitary and biological aspect.

The principle of international scientific and medical solidarity was a fairly well-established achievement of the pre-war period. Now after the terrible world war, which has led to a number of grave social catastrophes and calamities, including the Russian famine, that solidarity must come again into active existence.

Contributions in money should be sent to Treasurer, Medical Aid Committee, London Joint City and Midland Bank, 6, Chancery Lane, W.C. 2. They will be acknowledged by the Bank.

Contributions in kind should be sent to Secretary, Medical Aid Committee, 68, Lincoln's Inn Fields, W.C. 2, and will be acknowledged by the Secretary.

Reviews.

DIE GESCHICHTE DER KINDERHEILKUNDE. VON DR. JOHANN V. BÓKAY, Universitätsprofessor. Mit 99 Abbildungen. Berlin: Johannes Springer, 1922. Price 6s. paper, 6s. 10d. bound.

THE appearance of Prof. Johann von Bókay's 'History of Pædiatrics' on the occasion of the eightieth anniversary of the Buda Pesth Stephanie Children's Hospital and the centenary of his father's birth will be welcomed by all interested in the study of children's diseases and the history of medicine. The writer is probably well known to most of our readers as the son of the founder of the School of Pædiatrics in Hungary, and as the present occupant of the Chair of Pædiatrics in the University of Buda Pesth. The work is characterised by a remarkable breadth of view and a cosmopolitan spirit in the best sense of the word, due credit being given to the representatives of each country for their contribution to the study of children's diseases.

This work is divided into three chapters. The first is devoted to the history of the care of children in antiquity and the middle ages and the dawn of pædiatrics in the eighteenth century. The second chapter deals with the establishment of children's hospitals in the first half of the nineteenth century and the history of pædiatrics until the close of the nineteenth century, including an account of the Hungarian School of Pædiatrics. It is noteworthy that while the Hôpital des Enfants malades, in Paris, founded in 1802, was the first children's hospital, a dispensary for sick children was established by G. Armstrong in London in 1769, but came to an end two years later on the death of its founder. The third chapter is concerned with the history of pædiatrics in the twentieth century. The text is accompanied by numerous illustrations of children's hospitals, including the hospital in Great Ormond Street in the sixties and at the end of the nineteenth century, and portraits of leading pædiatrists. Like the reviewer many will doubtless be interested to see for the first time the portraits of Brudzinsky, Concetti, Filatow, Finkelstein, Hirschsprung, Holt, Hutinel, Medin and Pirquet, to mention some of the most distinguished pædiatrists of nine different countries. It is to be regretted that with the exception of John Fothergill, no British physician finds a place in this gallery.

The only error we have detected is on p. 39, where the writer, apparently unaware that Abraham Colles was a distinguished Dublin surgeon, speaks of two *French* doctors, Colles and Baumès, who laid down the well-known law connected with lactation in congenital syphilis.

The absence of an index will, we hope, be remedied in a subsequent edition.
J. D. R.

PRACTICAL HANDBOOK ON DISEASES OF CHILDREN. By BERNARD MYERS, C.M.G., M.D.Edin., M.R.C.P.Lond., Physician to the Royal Waterloo Hospital for Children and Women, etc. Pp. 548. 61 illustrations. London: H. K. Lewis & Co. Ltd., 1922. Price 21s.

THIS handy and attractive volume gives within a comparatively short compass a wonderfully comprehensive, exceedingly lucid and most up-to-date

exposition of the principles and practical details of the anatomy, physiology and clinical examinations as well as the diseases of the various systems of the child's body. It consists of 33 chapters, each of which is so well and judiciously compressed as to contain just as much as the student and general practitioner require, without being overburdened with those irritating details which can only appeal to the specialist. The illustrations, which are uniformly good, possess the special merits of being original and really relevant. There is also a very complete index.

With the wonderful progress that has been made of recent years in the various branches of pædiatrics, it would seem that the title of pædiatrician is much too broad to be adopted by any one person. Dr. Myers, who is essentially a clinician, has therefore enlisted the help of such eminent men as Sir William Bayliss, Dr. Mackenzie Wallis, Prof. John Eyre and others to write for him chapters or paragraphs on those subjects upon which they are respectively the recognised authorities, and there is no need to say that they have all done their tasks exceedingly well.

As we think that the book will soon reach a second edition we venture to point out to Dr. Myers a few printers' errors. On p. 3 he mentions that the contents of the stomach gravitate to the bottom "when the stomach is in the vertical position." What he obviously meant was "when the infant is in the vertical position." On p. 57 he gives the daily requirements of an infant as "2 to 3 litres of milk per square metre of surface." He clearly meant to say 2·3 litres. *Collosal* iron on p. 242 should be *collosol*. There are several other misprints of this nature which the author would do well to correct in the next edition. The index will also require a little revision.

We congratulate the author on having produced what we believe to be the best short book on the diseases of children.

W. M. F.

LES PÉRICARDITES AIGUES. Par le Dr. GERMAIN BLECHMANN. Avant-Propos de M. le Prof. MARFAN. Paris: Ernest Flammarion, 1922. Price 10 fr.

DR. GERMAIN BLECHMANN, whose excellent thesis on pericardial effusion was reviewed in this Journal some years ago (see *BRITISH JOURNAL OF CHILDREN'S DISEASES*, 1913, x, p. 286), is one of the most distinguished of the younger generation of French pædiatrists. The present work will prove of special interest to English readers, as Dr. Blechmann shows a remarkably intimate knowledge of English medical literature, and most of his statistics are derived from those of the London hospitals reported by various observers at a special meeting on pericarditis at the Medical Section of the Royal Society of Medicine in 1910. In a foreword to the volume Prof. Marfan remarks that there are few morbid conditions to which so large a number of symptoms have been attributed as pericardial effusion, some of which have no value whatever, while most of them have only a relative value, as Dr. Blechmann shows in the course of the work. The book is divided into five parts, the first dealing with the history and ætiology of acute pericarditis, the second with dry pericarditis, the third with the signs of pericardial effusion, the fourth with the forms, diagnosis and prognosis of pericardial effusion, and the fifth with the medical and surgical treatment of pericarditis.

The work is not only "methodical, substantial and complete," to use Prof.

Marfan's appreciative words, but is written in an eminently readable style, so that we have no hesitation in recommending it as a valuable addition to the literature of cardiovascular disease.

J. D. R.

ÉTUDE D'UN CAS D'ANÉVRYSME DE L'ARTÈRE PULMONAIRE AVEC ENDOCARDITE AIGUE CHEZ UNE ENFANT (GREFFÉS SUR UNE CARDIOPATHIE CONGÉNITALE). Par ANDRÉ PAULIN. Paris: Vigot Freres, 1922.

THE case is that of a girl of seven years, who during her life had presented no signs of functional disturbance of the heart, such as cyanosis or dyspnoea, but showed a well-marked systolic thrill and murmur at the third left intercostal space, which was diagnosed as due to an opening in the interventricular septum. She died after a short illness from an acute blood infection (pneumococcal) with signs of acute pericarditis and endocarditis. At the necropsy, in addition to the signs of recent heart infection, there were found the following abnormalities of congenital origin: An opening in the interventricular septum, stenosis of the orifice of the pulmonary artery, and a large aneurysm of the pulmonary artery extending the whole length of the main trunk.

The author believes that the aneurysm was part of the congenital defect, and traceable to the absence of elastic tissue in the arterial wall. At the same time he considers a syphilitic lesion as a possible cause, although no proof of that form of infection was discovered. The absence of any clinical symptoms during life and the complexity of the congenital lesions put the case into the category of rarities rather than instructive conditions. The author discusses the case well, and emphasises the importance in all cases of patent interventricular septum of looking out also for pulmonary stenosis.

G. A. S.

A SURVEY OF THE PRESENT POSITION OF SMALLPOX AND VACCINATION AS AFFECTING THIS COUNTRY. Being the address delivered to the Society of Medical Officers of Health on March the 17th, 1922. By W. McCONNELL WANKLYN, B.A., M.R.C.S., L.R.C.P. London: G. A. Wareham. Price 1s.

FACTS THAT YOU OUGHT TO KNOW ABOUT SMALLPOX AND VACCINATION. FOR ENQUIRING PATIENTS AND OTHERS. London: G. A. Wareham. Price 2d.

DR. WANKLYN, whose two previous works on smallpox were reviewed in this Journal (see *BRITISH JOURNAL OF CHILDREN'S DISEASES*, 1913, x, p. 527, and 1914, xi, p. 48), is to be congratulated on the timely appearance of these excellent pamphlets. In his 'Survey of the Present Position of Smallpox and Vaccination as Affecting this Country,' which contains a pious eulogy of the late Dr. T. F. Ricketts, author of the well-known text-book on 'The Diagnosis of Smallpox,' Dr. Wanklyn gives a table showing the deaths from smallpox in England and Wales and in London between 1841 and 1921, as well as the admissions of smallpox to the Metropolitan Asylums Board Hospitals since 1871, from which we see that the principal epidemics during the last 50 years occurred in 1871-2, 1876-82, 1884-5, 1893-4, and 1901-2. It is shown that whereas in the 16 years prior to 1904 the cases of smallpox totalled 15,587, in the 16 years since then they have totalled 282 only

—in other words, since 1904 there has been a diminution of over 15,000 cases. Dr. Wanklyn estimates that if each case of smallpox cost only £1 the saving has been £15,000, while if each case cost £100—a more probable approximation—£1,500,000 has been saved.

The little pamphlet entitled "Facts that you ought to know about Smallpox and Vaccination" contains in the form of a catechism, consisting of eight questions and answers, all that any layman should know on the subject.

J. D. R.

ANOMALE KINDER. Von Dr. L. SCHOLZ. Dritte umgearbeitete Auflage von Prof. Dr. ADALBERT GREGOR. Berlin: S. Karger, 1922. Price, M. 72 paper, M. 96 bound.

THE title of Dr. Scholz's book, the third edition of which, since the author's death in the war, has been prepared by Prof. Adalbert Gregor, is perhaps a little misleading. In a book entitled 'Anomalous Children' we might expect to find a study of inborn and constitutional peculiarities, both physical and psychical. We thought it might treat of dwarfs and giants and albinos, of children who bleed too easily or fracture their bones too readily, or who suffer from alkaptonuria, anaphylaxis, or a deficient tolerance for fat. In reality the book proves to be a close and careful study of the mentally deficient child and of the psychopathic child. It is written, we are told in the preface, both for the doctor and for the educationalist—a circumstance which perhaps accounts for the small amount of space devoted to pathology or morbid anatomy. Rather unexpectedly a short chapter upon chorea is included. Is the child who suffers from chorea an "anomalous" child? In the mild and transitory encephalitis which tends to accompany or follow rheumatic fever there is evidence for the time being of the removal or lessening of cortical control and of reciprocal innervation. Incoordinate contractions of antagonistic muscles and involuntary movements are therefore prone to occur together with transient alteration in the child's mentality. The child is ill with a transitory illness, but why "anomalous"? On the other hand the much more severe disturbance of the cortex cerebri in encephalitis lethargica, which so commonly leaves behind it alterations apparently permanent in character and disposition, is not mentioned. The list of references to recent German literature upon the psychopathology of children is full and complete. No references to work other than German are given.

H. C. C.

PARALYSIE FLASQUE DU MEMBRE SUPÉRIEUR PAR POLIOMYÉLITE ANTÉRIEURE (PARALYSIE INFANTILE). TRAITEMENT ORTHOPÉDIQUE ET CHIRURGICAL. Par LOUIS MENCIAÈRE, Chirurgien de la Clinique orthopédique de Reims. Paris: J. Dumoulin, 1921.

THIS represents a very exhaustive study of over fifteen years' experience, and deals with the matter very fully from the clinical and operative points of view. The writer emphasises the fact that the paralysis is chiefly monoplegic in type, and attacks the shoulder girdle in particular.

He favours muscle transplants for flail shoulder, and after discussing the anatomy of the shoulder girdle, describes in great detail his operations

of suturing grafts of the trapezius to the humerus, and the pectoralis major graft to the trapezius, and their modifications.

He draws attention to the necessity of suturing in tension, and applying a plaster case in marked abduction. He considers arthrodesis of the shoulder a less satisfactory operation, and performs it but seldom, and only when the pectoral and trapezius muscles are paralysed.

He pleats and reefs muscles and tendons where the English School would re-educate or transplant, *e. g.* a weak biceps in an unstable elbow-joint.

He notes the value of the supinator longus and pronator radii teres in flexing the elbow, when the biceps and brachialis anticus are paralysed, and ankyloses a completely flail joint at a right angle.

The photographs and diagrams of the technique of the operations are excellent, but one would have liked a fuller description of the after-treatment.

The book will well repay perusal by the orthopædic surgeon.

B. W. H.

DIE FRIEDMANN-METHODE: KRITISCH BELEUCHTERT UNTER BERÜCKSICHTIGUNG DER GESAMTEN FRIEDMANN-LITERATUR. Von V. BOCK. Mit einem Vorwort von Prof. Dr. F. JESSEN. Leipzig: S. Hirzel, 1922. Pp. 152.

DR. FRIEDMANN, now a good number of years ago, essayed to cure tuberculosis with active immunity produced by injection of living tubercle bacilli obtained from a cold-blooded animal. These were avirulent for mammalia, but—*crede experto*—could give rise to inconvenient abscesses at the site of injection. The method, original and modified, has had a good trial, and that trial has resulted unfavourably, according to the judgment of the large majority, favourably in the opinion of a few. These few good opinions (notable amongst them Prof. Jessen's) are well set out in the book before us. It is of no avail for a reviewer to examine the arguments employed, because the matter is obviously one which time, and time alone, can decide. But it is getting rather late in the day if Friedmann's vaccine is going to be pronounced a success.

W. C. R.

BIBLIOGRAPHY OF HOOKWORM DISEASE. Publication No. 11. The Rockefeller Foundation International Health Board, New York City, 1922.

THE extensive character of this bibliography is shown by the fact that this volume contains 5680 entries occupying 366 pages. Another 20 pages are devoted to the titles of periodicals, and yet another 25 to authors' names. We learn from the preface that there were four peaks of activity in the production of literature on hookworm disease: the first in 1882, after the disease had attacked the workers in the St. Gothard tunnel, the second in 1903, during its spread in European mines, the third in 1910, terminating with the publication of Looss's monograph in 1911, and the fourth in 1917, just before America's entry into the world war, when activity in combating the disease in many of the tropical and semitropical countries was at its height. The bibliography is preceded by an introduction containing an account of the history of the disease, its prevalence throughout the world, and the campaign against hookworm in the United States.

J. D. R.

A SYNOPSIS OF MEDICINE. By HENRY LETHEBY TIDY, M.D., F.R.C.P.
Third Edition, revised and enlarged. Bristol: John Wright & Sons,
1923. Price 21s. net.

THE third edition of this useful handbook differs from the first two (*see* BRITISH JOURNAL OF CHILDREN'S DISEASES, 1920, xvii, p. 217; 1922, xix, p. 55) in having undergone a thorough revision and by the addition of several new articles, of which those on cyclical vomiting, celiac disease and Vincent's angina are of pædiatric interest. In subsequent editions we would suggest notes on erythredema, or the pink disease, the use of convalescent serum in the prophylaxis of measles, the intramuscular injection of antitoxin as the method of choice in the treatment of diphtheria, and the employment of the quartz lamp in rickets.

J. D. R.

"SUGGESTION" AND COMMON SENSE. By R. ALLAN BENNETT, M.D.,
M.R.C.P. Pp. 105. Bristol: John Wright & Sons, Ltd., 1922.
Price 6s. net.

WHILE Dr. Bennett in a short preface to his little book explains that twenty years ago on the advice of the late Dr. Charles Mercier he foreswore psychology, and that "these artless pages are the result," he does himself something less than justice. It is true, however, that throughout the volume he is concerned less with the mental processes involved in cure by suggestion than with the results themselves, and possibly the book loses in value to this extent in consequence, but even as it stands a perusal of the chapters should prove stimulating to the average medical practitioner. The author has a way of discarding the irrelevant and getting down at once to fundamentals, as when in discussing auto- and hetero-suggestion he observes that in the last resort all suggestion is self-suggestion. This particular point, indeed, is emphasised throughout the book, while Dr. Bennett's personal opinion of the therapeutic uses of suggestion may be given in his own words: "For my part I am convinced, and experience supports and increases the conviction, that no ailment, organic or functional, is beyond the reach of help by suggestion, provided that the patient is capable of exercising the requisite intelligence" (p. 57). The necessity for each case to be considered upon its own merits is, however, insisted upon, and due allowance made for the way in which internal and external agencies react upon and reinforce each other. The book is suggestive and is well worth reading.

E. M.

REVISED WEIGHT CHARTS FOR MALE AND FEMALE BABIES. Issued by the
Galton Laboratory for National Eugenics. Cambridge University
Press. Price 7s. 6d. net.

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This is all very interesting to the professional statistician, but to the clinician the value of these charts is negligible. In the first instance no experienced clinician would venture to foretell any individual infant's future from the character of weight alone. There are so many considerations of an hereditary and environmental character that are of more importance in any given case than the mere weight of the baby. Secondly, it is difficult to understand what those responsible for the charts exactly mean by the "healthiness" of a child, and by what criterion or unit they estimate the relative "health standing" of an infant of the weight and age mentioned above. Moreover the charts have been constructed from a number of observations on infants of the poorer classes, and cannot therefore be properly applied—even by statisticians—to infants of the middle and richer strata of society.

The pædiatrician who is familiar with the use of graphs will perhaps find these charts an interesting toy, but we think their price is too high.

W. M. F.



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